ORAL ARGUMENT NOT YET SCHEDULED

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

AMERICAN WATER WORKS ASSOCIATION, and ASSOCIATION OF METROPOLITAN WATER AGENCIES, *Petitioners*, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, and MICHAEL S. REGAN, in his official capacity as Administrator, United States Environmental Protection Agency, *Respondents*.	No. 24-1188 consolidated with Nos. 24-1191, 24-1192

MOTION OF NATURAL RESOURCES DEFENSE COUNCIL TO INTERVENE IN SUPPORT OF RESPONDENTS

Pursuant to Federal Rule of Appellate Procedure 15(d) and D.C. Circuit Rule 15(b), the Natural Resources Defense Council (NRDC or Movant) moves to intervene in support of Respondents U.S. Environmental Protection Agency (EPA) and its Administrator, Michael S. Regan, in the above-captioned challenge and consolidated challenges, to a rule titled: "PFAS National Primary Drinking Water Regulation," 89 Fed. Reg. 32,532 (Apr. 26, 2024) ("PFAS Drinking Water Rule" or the "Rule"). Because NRDC has significant interests in defending the Rule,

existing parties may not adequately represent those interests, and this motion is timely, the Court should grant the request to intervene.

Counsel for NRDC contacted counsel for Petitioners and Respondents for their positions on this motion. None of the parties indicated a present intent to oppose. Counsel for Respondents stated that they take no position. Counsel for Petitioners American Water Works Association and Association of Metropolitan Water Agencies stated that they reserve their position until they see this motion. Counsel for Petitioners National Association of Manufacturers and American Chemistry Council stated that they take no position. Counsel for Petitioner The Chemours Company FC, LLC (Chemours) stated that it takes no position pending review of this motion.

BACKGROUND

Per- and polyfluoroalkyl substances (PFAS) are a "class of thousands of synthetic chemicals" that are widely used in an array of consumer, commercial, and industrial products due to their ability to "withstand heat and repel water and stains." 89 Fed. Reg. at 32,536. PFAS chemicals, often colloquially called "forever chemicals," are extremely persistent in the environment; they resist degradation and can bioaccumulate in humans and wildlife. *See id.* A wide range of adverse health effects are linked to PFAS exposure including "effects on the liver (*e.g.,* liver cell death), growth and development (*e.g.,* low birth weight), hormone levels,

kidney, the immune system (reduced response to vaccines), lipid levels (*e.g.,* high cholesterol), the nervous system, and reproduction, as well as increased risk of certain types of cancer." *Id.* at 32,537. PFAS exposure "may have disproportionate health effects on children," starting *in utero* and continuing through the early years of life. *Id.*

The Safe Drinking Water Act, 42 U.S.C. §§ 300f *et seq.*, entrusts EPA to safeguard the nation's public drinking water from harmful contaminants. EPA is empowered to regulate a new contaminant in drinking water if the agency determines that the contaminant "may have an adverse effect on the health of persons," is known or likely to occur "with a frequency and at levels of public health concern," and "regulation of such contaminant presents a meaningful opportunity for health risk reduction." *Id.* § 300g-1(b)(1)(A); *see NRDC v. Regan*, 67 F.4th 397, 398-99 (D.C. Cir. 2023). If EPA determines that a new contaminant should be regulated, it must promulgate an aspirational maximum contaminant level goal—a "level at which no known or anticipated adverse [health] effects" occur—and an enforceable maximum contaminant level (MCL) that must be set at a level that is "as close . . . as is feasible" to the MCL goal. 42 U.S.C.

§ 300g-1(b)(4)(A), (B); *NRDC v. Regan*, 67 F.4th at 399.[1] To set a feasible MCL for enforcement purposes, EPA must consider available treatment technologies, 42 U.S.C. § 300g-1(b)(4)(D), and evaluate both quantifiable and nonquantifiable benefits and costs to determine "whether the benefits of the maximum contaminant level justify, or do not justify, the costs," *id.* § 300g-1(b)(3)(C)(i)(I)-(III), (b)(4)(C).

The PFAS Drinking Water Rule regulates six PFAS chemicals: perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), hexafluoropropylene oxide dimer acid (HFPO-DA, commonly called GenX), and perfluorobutane sulfonic acid (PFBS). 89 Fed. Reg. at 32,532-33. EPA set individual MCLs for five of them: PFOA (4.0 nanograms per liter (ng/L) or parts per trillion (ppt)), PFOS (4.0 ppt), PFNA (10 ppt), PFHxS (10 ppt), and GenX (10 ppt). *Id.* at 32,532. EPA also set a Hazard Index MCL of 1 (unitless) for mixtures of two or more of PFBS, PFNA, PFHxS, and GenX to account for dose-additive

[1] If EPA finds that it is not economically or technologically feasible to ascertain the level of a contaminant, EPA is authorized to set a "treatment technique" instead of an MCL, 42 U.S.C. § 300g-1(b)(7)(A), but EPA did not invoke this provision in the PFAS Drinking Water Rule.

health effects of co-occurring PFAS chemicals.[2] *Id.* at 32,532-33. As many as 105 million people in the United States are served by water systems contaminated by at least one of these six PFAS chemicals at levels exceeding the Rule's MCLs. *Id.* at 32,600. The Rule also includes requirements for monitoring, reporting, and public communication of water systems' compliance with the new MCLs. *See id.* at 32,606-22. EPA concluded that the quantified net benefits of the Rule are "nearly at parity," but that the combination of quantified and unquantified net benefits justifies the Rule. *Id.* at 32,533-34.

EPA proposed the PFAS Drinking Water Rule in March 2023 and provided a 60-day comment period. 88 Fed. Reg. 18,638, 18,638 (Mar. 29, 2023). The agency received approximately 122,200 written and oral comments, including about 1,700 unique public comments, and "[t]he vast majority of the comments were generally supportive of the EPA's efforts to regulate PFAS in drinking water and requested that the EPA expeditiously finalize the [Rule]." EPA, Responses to Public Comments at xxii, Docket ID EPA-HQ-OW-2022-0114-3077. In response to requests from water systems, EPA extended the compliance deadline for the new MCLs to April 2029—five years after the Rule was promulgated—to allow water

[2] The Hazard Index essentially calculates what percent of each PFAS chemical's MCL (or, for PFBS, a similar Health Based Water Concentration) is present in drinking water and then sums the percentages. The Hazard Index MCL is exceeded if the total percentage is greater than 100 percent. *See* 89 Fed. Reg. at 32,533.

systems more time to install new treatment infrastructure. 89 Fed. Reg. at 32,632-33. Compliance with all other requirements of the PFAS Drinking Water Rule is required within three years, which is the statutory default. *Id.* at 32,633; 42 U.S.C. § 300g-1(b)(10).

These consolidated petitions for review, if successful, could deprive tens of millions of people, including many NRDC members, of the PFAS Drinking Water Rule's health and informational benefits. NRDC seeks to intervene to protect the health and welfare of its members from PFAS contamination that will be left unmitigated if the Rule is not fully and timely implemented.

ARGUMENT

I. NRDC satisfies the requirements for intervention

Intervenors seeking to join a case reviewing agency action in the court of appeals must file a motion within 30 days and provide a "concise statement" of interest and "grounds for intervention." Fed. R. App. P. 15(d). This Court has sometimes looked to district court intervention standards when evaluating motions in the court of appeals. *See Mass. Sch. of L. at Andover, Inc. v. United States*, 118 F.3d 776, 779-80 (D.C. Cir. 1997); *Bldg. & Constr. Trades Dep't v. Reich*, 40 F.3d 1275, 1282 (D.C. Cir. 1994) (noting the Supreme Court's recognition that "the policies underlying intervention [in district court] may be applicable in appellate courts" (quoting *Int'l Union v. Scofield*, 382 U.S. 205, 217 n.10 (1965))). In district

court, a movant is entitled to intervene as of right when: (1) its motion is "timely"; (2) the movant claims an "interest" relating to the "subject of the action"; (3) disposition of the action "may as a practical matter impair or impede the movant's ability to protect its interest"; and (4) the existing parties may not "adequately represent" the movant's interest. Fed. R. Civ. P. 24(a)(2). In addition, a party may intervene permissively in district court if its motion is timely and it has "a claim or defense" that shares a question of law or fact with the main action. Fed. R. Civ. P. 24(b)(1)(B). NRDC satisfies each standard.

A. This motion is timely

This motion is timely filed within 30 days of the first petition for review. ECF No. 2058535 (filed June 7, 2024); Fed. R. App. P. 15(d).

B. NRDC has interests in the PFAS Drinking Water Rule sufficient for intervention and to demonstrate standing

NRDC has significant interests in the Rule, within the meaning of Federal Rule of Appellate Procedure 15(d) and Federal Rule of Civil Procedure 24(a)(2). The Rule will reduce exposures to toxic PFAS chemicals and require mandatory monitoring and reporting of PFAS chemicals in drinking water nationwide. Defending the Rule will advance NRDC's organizational mission, which includes protecting public health, the environment, and the health and welfare of its members.

NRDC has long advocated for restrictions on PFAS chemicals, including in drinking water. *See* Declaration of Gina Trujillo (Trujillo Decl.) ¶¶ 5-7. NRDC submitted detailed comments on the proposed PFAS Drinking Water Rule. *See* Comments of Earthjustice, NRDC, et al. (Earthjustice & NRDC Comments), EPA Docket ID EPA-HQ-OW-2022-0114-1808 (May 30, 2023); Comments of NRDC et al., EPA Docket ID EPA-HQ-OW-2022-0114-1723 (May 28, 2023). The comments called on EPA to maintain and strengthen the proposed Rule, including by resisting efforts to weaken the MCLs and MCL goals; lowering the thresholds used to calculate the Hazard Index MCL to reduce further the dangers to infants, children, and other higher-risk populations; accounting more fully for the health benefits of reduced PFAS exposures in the Rule's economic analysis; adjusting the methodology for PFAS monitoring to better detect non-compliance with the MCLs; maintaining the minimum requirement of quarterly PFAS monitoring for all water systems with prior PFAS detections; and mandating public notification of MCL violations within 24 hours.

As part of its broader advocacy for additional PFAS regulation, NRDC has extensively documented and commented on PFAS chemicals' health effects and related legal and regulatory issues. NRDC's experts have reviewed over 1,000 studies evaluating the health impacts of PFAS exposures and provided public comments on EPA's toxicity assessments for PFOA, PFOS, PFNA, PFHxS, GenX,

and PFBS. Earthjustice & NRDC Comments, Ex. A at 1-2. NRDC's experts have also critically evaluated and commented on health and risk assessment documents for PFAS developed by California, Illinois, Michigan, New Hampshire, New Jersey, New York, Vermont, and Washington. *Id.* at 2. And NRDC has repeatedly testified before Congress on the dangers of PFAS contamination. Trujillo Decl. ¶ 6.

NRDC has Article III standing to intervene, should that be required,[3] which means NRDC "*a fortiori* has an interest relating to the property or transaction which is the subject of the action." *Crossroads Grassroots Policy Strategies v. Fed. Election Comm'n*, 788 F.3d 312, 320 (D.C. Cir. 2015) (cleaned up). The standing inquiry for an intervening defendant is "the same as for a plaintiff: the intervenor must show injury in fact, causation, and redressability." *Id.* at 316. However, if a party defending an agency action can show injury from a successful challenge, "it rationally follows" that the injury is traceable to the challenge and preventable by defeating the challenge. *Id.* Thus, an intervenor defending agency action can generally prove all three elements if it "benefits from [the] agency

[3] The Supreme Court has called into question whether defendant-intervenors need to demonstrate standing, because they do not invoke a court's jurisdiction. *See Va. House of Delegates v. Bethune-Hill*, 139 S. Ct. 1945, 1951 (2019) (noting that a party intervening as a defendant or appellee, and thus not invoking the court's jurisdiction, did not need to demonstrate standing). NRDC explains here why it has standing, however, as the same evidence shows NRDC's interest in intervention and this Court has continued to require defendant-intervenors to establish standing. *See Yocha Dehe v. U.S. Dep't of the Interior*, 3 F.4th 427, 430 (D.C. Cir. 2021).

action, the action is then challenged in court, and an unfavorable decision would remove the . . . benefit." *Id.* at 317. To demonstrate associational standing, NRDC must also show that (1) at least one of its members would have standing to intervene in their own right; (2) the interests the organization seeks to protect are germane to its purpose; and (3) the participation of individual members is not required. *Hearth, Patio & Barbecue Ass'n v. EPA*, 11 F.4th 791, 802 (D.C. Cir. 2021).

NRDC members would have standing to intervene in their own right to protect their interests in the Rule's health protections and informational benefits. NRDC members live in many places with a toxic legacy of PFAS contamination, such as from neighboring manufacturing activity, aviation and firefighting training facilities, and military installations. *See, e.g.*, Declaration of Paul Ames (Ames Decl.) ¶ 4; Declaration of Randall Dail, Jr. (Dail Decl.) ¶ 5; Declaration of Robert Sauerhoff (Sauerhoff Decl.) ¶ 3; Declaration of Erin Stephens (Stephens Decl.) ¶¶ 3, 5. Members have repeatedly received notices from their water systems warning of elevated PFAS levels. *See, e.g.*, Declaration of T. Michael Harrison (Harrison Decl.) ¶ 5; Dail Decl. ¶ 6; Declaration of Nicole Vandal (Vandal Decl.) ¶ 10 & Ex. E.

NRDC members are well informed of the wide range of health harms and risks associated with PFAS exposure, such as effects on the liver, hormone levels,

kidney, immune system, nervous system, and certain types of cancer. *See, e.g.*, Dail Decl. ¶ 9; Harrison Decl. ¶ 4; Sauerhoff Decl. ¶ 5; Stephens Decl. ¶ 8; *see also* 89 Fed. Reg. at 32,537. Members are also aware of the "forever" nature of these chemicals, and they are concerned about the long-term health effects of persistent, toxic chemicals that may bioaccumulate in people. *See, e.g.*, Ames Decl. ¶¶ 7-8; Stephens Decl. ¶ 8. NRDC members' concerns about potential health effects from PFAS exposure are borne out by water system data and reports showing average and maximum PFAS concentrations in their water at levels that, if replicated through the PFAS Drinking Water Rule's required compliance monitoring, would exceed one or more of the Rule's MCLs. Vandal Decl. ¶¶ 12-13, tbls. 1, 2 & Ex. E. Also, many water systems serving NRDC members do not currently monitor and report the concentrations of one or more of the six EPA-regulated PFAS chemicals. *Id.* That leaves information gaps that will be filled when the Rule's monitoring and reporting requirements take full effect, allowing NRDC members to take actions to protect their health, like deciding whether to filter their drinking water, based on more complete information about the contaminants in their water.

Many NRDC members live in places where PFAS chemicals in drinking water are currently unregulated. *See, e.g.*, Vandal Decl. Exs. A at 5, B at 10-11, C (water system reports describing PFAS as unregulated contaminants). Many other

NRDC members live in places where state PFAS drinking water standards are weaker and less comprehensive than EPA's MCLs. *Compare, e.g.*, Vandal Decl. Ex. E at 2 (explaining that New Jersey adopted state standards of 14 ppt for PFOA and 13 ppt for PFOS) *and* Ex. F at 12 (noting New York adopted state standards of 10 ppt for PFOA and PFOS) *with* 89 Fed. Reg. at 32,532 (setting MCLs of 4 ppt for PFOA and PFOS). Some NRDC members have resorted to purchasing bottled water or buying and maintaining a home water filter in an effort to protect themselves from PFAS and other contamination in their water, *see, e.g.*, Dail Decl. ¶ 5; Harrison Decl. ¶¶ 6-7; Sauerhoff Decl. ¶ 7; Stephens Decl. ¶¶ 7-8, incurring costs that may be reduced or unnecessary once the PFAS Drinking Water Rule takes full effect. Other NRDC members have been deterred from purchasing water filters by costs or logistics and rely on their water system to prevent their exposure to PFAS in their drinking water in their home. *See, e.g.*, Ames Decl. ¶ 8; Dail Decl. ¶ 7; Harrison Decl ¶ 7-8. NRDC members rely on EPA to set health-protective MCLs for PFAS chemicals in drinking water and rely, or would like to be able to rely, on their water systems to meet the MCLs and to conduct regular monitoring and reporting to ensure ongoing compliance. *See, e.g.*, Ames Decl. ¶¶ 8, 10.

"Adverse health effects," including assertions of "realistic health concerns," are sufficient "Article III injuries." *Clean Wis. v. EPA*, 964 F.3d 1145, 1156 (D.C. Cir. 2020); *see also Cal. Cmtys. Against Toxics v. EPA*, 928 F.3d 1041, 1048-49

(D.C. Cir. 2019) (holding members' "reasonable fear of [] health or environmental risks" suffice for Article III standing); *NRDC v. EPA*, 755 F.3d 1010, 1016-17 (D.C. Cir. 2014) (recognizing standing based on declarations of members' concerns about health effects from pollution exposure). In addition, because these six PFAS chemicals are now regulated contaminants, the Safe Drinking Water Act compels water systems to monitor and publicly report on them. *See* 42 U.S.C. § 300g-3(c) (requiring water systems to provide various notices to consumers about regulated contaminants and MCL compliance, including annual consumer confidence reports). NRDC members will suffer an informational injury if the Rule is delayed or vacated because the resulting lack of statutorily mandated reporting about PFAS chemicals in their drinking water would hinder their ability to take appropriate, well-informed, health-protective actions. *See Waterkeeper All. v. EPA*, 853 F.3d 527, 533-34 (D.C. Cir. 2017) (finding informational injury where EPA action reduced public reporting and disclosure obligations); *TransUnion LLC v. Ramirez*, 594 U.S. 413, 441-42 (2021) (discussing informational injury standards). If Petitioners succeed in this challenge by delaying, vacating, or weakening the Rule, that "would remove the . . . benefit[s]" of the Rule to NRDC's members. *Crossroads*, 788 F.3d at 317. NRDC's members would thus have standing to intervene to defend the Rule.

The interests NRDC seeks to protect are germane to its organizational purposes of protecting health, ensuring the safety of drinking water, and reducing exposures to toxic chemicals, including contaminants in drinking water. Trujillo Decl. ¶¶ 4-8; *see Chesapeake Climate Action Network v. EPA*, 952 F.3d 310, 318 (D.C. Cir. 2020) (finding environmental organization's members had interests in reducing exposure to pollution and those interests were germane to the organization's purpose); *Nat'l Lime Ass'n v. EPA*, 233 F.3d 625, 636 (D.C. Cir. 2000) (characterizing germaneness requirement as "undemanding").

NRDC's defense does not require the participation of individual members. Petitioners' arguments are questions of law or fact that will be resolved on the administrative record and will not require any consideration of members' individual circumstances. *See Ctr. for Sustainable Econ. v. Jewell*, 779 F.3d 588, 597-98 (D.C. Cir. 2015) ("Member participation is not required where a suit raises a pure question of law and neither the claims pursued nor the relief sought require the consideration of the individual circumstances of any aggrieved member of the organization." (internal quotation marks omitted)).

A successful defense of the PFAS Drinking Water Rule will obtain for NRDC's members the full and timely benefits of significant reductions in toxic PFAS chemicals in their drinking water, and of receiving key information about PFAS contamination of their tap water. NRDC satisfies the requirements for

Article III standing and these interests are more than sufficient to support defensive intervention.

C. NRDC's interests would be threatened by an adverse ruling

The PFAS Drinking Water Rule will benefit NRDC members by reducing exposure to, and health-related risks and harms from, PFAS chemicals in drinking water. It also ensures that NRDC members' water systems will monitor and publicly report on PFAS chemicals in their drinking water. An order weakening, delaying, or vacating the Rule would harm NRDC, risk its members' health and welfare, and deprive NRDC members of critical information about the safety of their drinking water. In light of NRDC's years of advocacy to protect its members from PFAS contamination in drinking water, "there is no question that the task of reestablishing the status quo if the [Petitioners] succeed[] in this case will be difficult and burdensome." *Fund for Animals, Inc. v. Norton*, 322 F.3d 728, 735 (D.C. Cir. 2003). Furthermore, consistent with NRDC's mission and utilizing the Safe Drinking Water Act's citizen's civil action provision, 42 U.S.C. § 300j-8, NRDC has a history of enforcing national primary drinking water standards against water systems that violate a standard and endanger NRDC members and the general public. *See, e.g.*, *Concerned Pastors for Soc. Action v. Khouri*, 217 F. Supp. 3d 960 (E.D. Mich. 2016), *aff'd*, 844 F.3d 546 (6th Cir. 2016). The PFAS Drinking Water Rule took effect on June 25, 2024, and water systems are now

required to meet compliance deadlines in 2027 and 2029. 89 Fed. Reg. at 32,633. NRDC has an interest in enforcing the Rule when the compliance deadlines arrive, to prompt reductions in PFAS contamination and protect NRDC's members. Its ability to do so will be nullified if the Rule is vacated.

In addition, because this litigation concerns questions of law under the Safe Drinking Water Act, an adverse judgment "may as a practical matter impair or impede" NRDC's ability to fully pursue its claims in other Safe Drinking Water Act litigation. *See* Fed. R. Civ. P 24(a)(2); *Peters v. District of Columbia*, 873 F. Supp. 2d 158, 218 (D.D.C. 2012) ("Impairment exists when the decision in a pending matter would foreclose or adversely affect the rights of the proposed intervenor in a subsequent proceeding."). NRDC regularly litigates issues under the Safe Drinking Water Act to protect its members' interests in reducing health harms and risks from drinking water. For example, NRDC is a petitioner in ongoing litigation over EPA's regulation of lead in drinking water, which includes issues related to EPA's decision whether to set an MCL for lead. *See* Opening Br. of Env't Pet'rs at 23-32, *NRDC v. Regan*, No. 21-1020 (D.C. Cir. filed Aug. 8, 2022), ECF No. 1958365 (case presently stayed pending an ongoing rulemaking). NRDC is also a defendant-intervenor in a pending Third Circuit case regarding EPA's health advisory for GenX, which addresses issues that petitioner Chemours intends to raise in this action as well. *See* Chemours Pet. for Review 2, ECF No.

2059361 (citing *The Chemours Co. v. EPA*, No. 22-2287 (3rd Cir. filed July 13, 2022)). In addition, NRDC recently prevailed in litigation regarding EPA's determination to regulate perchlorate in drinking water, *NRDC v. Regan*, 67 F.4th 397 (D.C. Cir. 2023), and is party to an ongoing consent decree that requires EPA to issue a perchlorate MCL by 2027, *see* Stip. to Modify Consent Decree, ECF Nos. 105, 105-1, *NRDC v. U.S. EPA*, No. 16-cv-1251 (S.D.N.Y. filed Jan 5, 2024). The resolution of legal issues in this litigation may affect NRDC's ability to protect its interests in these or other future cases. Thus, the disposition of this case "may as a practical matter impair or impede" NRDC's ability to protect its broader interest in the regulation of drinking water contaminants under the Safe Drinking Water Act. *See* Fed. R. Civ. P. 24(a)(2); *Crossroads*, 788 F.3d at 320.

D. NRDC's interests may not be adequately represented by EPA

NRDC's interests in this case are sufficiently distinct from EPA's, such that EPA may not adequately represent them. *See* Fed. R. Civ. P. 24(a)(2). The burden to show inadequate representation for purposes of intervention is "minimal," *Trbovich v. United Mine Workers of Am.*, 404 U.S. 528, 538 n.10 (1972), and "not onerous," *Dimond v. District of Columbia*, 792 F.2d 179, 192 (D.C. Cir. 1986). It is sufficient that there may be a "clear possibility of disparate interests." *NRDC v. Costle*, 561 F.2d 904, 912 (D.C. Cir. 1977). And this Court "look[s] skeptically on government entities serving as adequate advocates for private parties," *Crossroads*,

788 F.3d at 321, "often conclud[ing] that governmental entities do not adequately represent the interests of aspiring intervenors," *Fund for Animals*, 322 F.3d at 736.

NRDC readily meets this "minimal" burden of establishing that EPA's representation "may be" inadequate. *Trbovich*, 404 U.S. at 538 n.10. While EPA must balance multiple interests and stakeholder perspectives in defending the Rule, NRDC's goals are narrower: to advance its organizational mission by protecting its members and ensuring that drinking water regulations achieve the greatest reductions of drinking water contaminants as soon as possible. *See* Trujillo Decl. ¶¶ 4-8. NRDC has a distinct interest in protecting the health and welfare of its members from PFAS contamination in drinking water and in ensuring that water systems serving its members monitor, report, and, as needed, reduce PFAS contamination when the Rule goes into effect. *See, e.g.*, *id.*; Vandal Decl. ¶¶ 12-13, tbls. 1, 2 & Ex. E. Indeed, in public comments, NRDC advocated for more stringent PFAS limitations than EPA ultimately adopted. *Compare*, *e.g.*, Earthjustice & NRDC Comments at 16-17, 23-31 (urging EPA, for purposes of the Hazard Index MCL, to use lower health-based thresholds of 2 ppt for PFHxS, 240 ppt for PFBS, 2 ppt for PFNA, and 2 ppt for GenX), *with* 89 Fed. Reg. 32,533 (retaining thresholds of 10 ppt for PFHxS, 2,000 ppt for PFBS, 10 ppt for PFNA, and 10 ppt for GenX); Earthjustice & NRDC Comments at 31-33 (encouraging EPA to include all quantified PFAS detections, including those below the practical

quantitation limit (PQL), when calculating MCL compliance), *with* 89 Fed. Reg. 32,575 (results less than the PQL will be recorded as zero); Earthjustice & NRDC Comments at 36-39 (asking EPA to adjust the proposed public notice designation for violations of the PFAS MCLs from Tier 2 to Tier 1) *with* 89 Fed. Reg. 32,621 (rejecting Tier 1 and retaining slower Tier 2 notifications for MCL violations).

NRDC also has a long history of differing from EPA concerning the interpretation of the Safe Drinking Water Act and EPA's duties under the Act. For example, NRDC has a pending petition for review regarding EPA's 2021 national primary drinking water standard for lead. *NRDC v. Regan*, No. 21-1020 (D.C. Cir. filed Jan. 15, 2021) (currently stayed pending an ongoing rulemaking). In recent years, NRDC also repeatedly and successfully challenged EPA's failure to promulgate a national primary drinking water standard for perchlorate. *See NRDC v. Regan,* 67 F.4th at 398, 400-01. NRDC's history of Safe Drinking Water Act litigation goes back more than three decades and shows a consistent pattern of taking positions that differ from EPA's positions. *See, e.g.*, *NRDC v. EPA*, 812 F.2d 721 (D.C. Cir. 1987) (challenge to drinking water standard for fluoride); *NRDC v. EPA*, 824 F.2d 1211 (D.C. Cir. 1987) (challenge to drinking water standard for volatile organic compounds); *Am. Water Works Ass'n v. EPA*, 40 F.3d 1266 (D.C. Cir. 1994) (consolidated challenges to EPA's 1991 drinking water standard for lead and copper). Over the decades, NRDC also repeatedly has been a

defendant-intervenor in other parties' challenges to EPA drinking water standards, despite sharing EPA's overall goal of defending these rules or portions of them. *See, e.g.*, *Chlorine Chemistry Council v. EPA*, 206 F.3d 1286 (D.C. Cir. 2000) (chloroform standard); *NRDC v. EPA*, 824 F.2d 1211 (D.C. Cir. 1987) (NRDC was both a petitioner and defendant-intervenor in consolidated challenges to the volatile organic compounds standard).

Based on NRDC's narrower interests and long history of differing with EPA about various legal and scientific issues related to national primary drinking water standards, NRDC has sufficiently distinct interests to support intervention. *See Crossroads*, 788 F.3d at 321 (noting the government and intervenor's sufficiently different interests where they disagreed about the extent of the government's regulatory power, among other things); *Fund for Animals*, 322 F.3d at 737 ("Although there may be a partial congruence of interests, that does not guarantee the adequacy of representation."); *Costle*, 561 F.2d at 913 (finding that a shared "overall point of view" is not enough for adequate representation). "Without calling the good faith of EPA into question in any way," there is ample evidence that, in this action, NRDC "may well have honest disagreements with EPA on legal and factual matters." *Costle*, 561 F.2d at 912.

Further, NRDC's participation will "serve as a vigorous and helpful supplement to EPA's defense." *Id.* at 912-13. NRDC's interests and expertise

provide it with perspectives different from EPA's. As discussed above, NRDC engaged in extensive advocacy around the development of the PFAS Drinking Water Rule and sought more stringent standards than were ultimately promulgated. NRDC has a long history of expertise in drinking water regulation broadly, and PFAS contamination specifically, and NRDC's "experience and expertise . . . can reasonably be expected to contribute to the informed resolution[]" of this litigation. *Id.* at 913. And, consistent with this Circuit's rules, NRDC will "focus on points not made or adequately elaborated upon in the [government's] brief." D.C. Cir. R. 28(d)(2).

E. NRDC also satisfies the standard for permissive intervention

Federal Rule of Civil Procedure 24 also grants the district courts discretion to allow "permissive" intervention when an applicant "has a claim or defense that shares with the main action a common question of law or fact," if it will not "unduly delay or prejudice the adjudication of the original parties' rights." Fed. R. Civ. P. 24(b)(1)(B), 24(b)(3); *see also Int'l Union*, 382 U.S. at 217 n.10 (citing both Rule 24(a) and (b) in noting that district court intervention policies may be applicable in appellate courts). NRDC meets these requirements as well.

To establish a "common . . . defense" in a challenge to agency action, it is enough that NRDC seeks to defend the agency's decision. *See Sault Ste. Marie Tribe of Chippewa Indians v. Bernhardt*, 331 F.R.D. 5, 14 (D.D.C. 2019). Here,

NRDC intends to offer arguments defending the PFAS Drinking Water Rule, which will share questions of law and fact with—indeed, will directly respond to—the underlying challenges. EPA's, Petitioners', and NRDC's arguments are all anticipated to be grounded in the administrative record, the Safe Drinking Water Act provisions under which EPA acted, and the Administrative Procedure Act provisions applicable to this rulemaking. Moreover, NRDC will not "unduly delay or prejudice" the adjudication of Petitioners' claims. *See* Fed. R. Civ. P. 24(b)(3). NRDC's motion is timely, NRDC will adhere to set briefing schedules and, as noted above, NRDC will avoid repetition of facts or arguments made in the principal respondents' briefs, focusing on relevant points that were inadequately developed or not addressed. *See* D.C. Cir. R. 28(d)(2).

CONCLUSION

For the foregoing reasons, this Court should grant NRDC leave to intervene in support of Respondents.

DATED: June 28, 2024

Respectfully submitted,

/s/ Jared J. Thompson

Jared J. Thompson
Natural Resources Defense Council
40 West 20th Street
New York, NY 10011
(202) 513-6249
jared.thompson@nrdc.org

Erik D. Olson
Natural Resource Defense Council
1152 15th Street NW, Suite 300
Washington, DC 20005
(202) 289-2415
eolson@nrdc.org

Karen Chen
Natural Resources Defense Council
111 Sutter Street, 21st Floor
San Francisco, CA 94104
(415) 875-8261
kchen@nrdc.org

Counsel for Natural Resources Defense Council

CIRCUIT RULE 26.1 DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1 and D.C. Circuit Rule 26.1, Movant Natural Resources Defense Council states that it is a non-profit environmental organization. NRDC has no parent corporation, and no publicly held corporation owns 10% or more of its stock.

DATED: June 28, 2024

Respectfully submitted,

/s/ Jared J. Thompson

Jared J. Thompson
Natural Resources Defense Council
40 West 20th Street
New York, NY 10011
(202) 513-6249
jared.thompson@nrdc.org

CERTIFICATE OF PARTIES

Pursuant to D.C. Circuit Rules 27(a)(4) and 28(a)(1)(A), I certify that the parties to this case and the cases with which it is consolidated are set forth below:

Petitioners: American Water Works Association, Association of Metropolitan Water Agencies, National Association of Manufacturers, American Chemistry Council, and The Chemours Company FC, LLC.

Respondents: United States Environmental Protection Agency, and Michael S. Regan, Administrator.

Intervenors and Amici: There are no intervenors or amici curiae as of the time of this filing. A jointly represented group of movant-intervenors including Buxmont Coalition for Safe Water, Clean Cape Fear, Clean Haw River, Concerned Citizens of WMEL Water Authority Grassroots, Environmental Justice Task Force, Fight for Zero, Merrimack Citizens for Clean Water, and Newburgh Clean Water Project seeks to intervene in support of Respondents.

DATED: June 28, 2024

/s/ Jared J. Thompson

Jared J. Thompson
Natural Resources Defense Council
40 West 20th Street
New York, NY 10011
(202) 513-6249
jared.thompson@nrdc.org

CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMIT

I hereby certify that the foregoing Motion to Intervene contains 4,986 words, excluding the items listed in Fed. R. App. P. 32(f), and was composed in Times New Roman font, 14-point. The motion complies with applicable type-volume and typeface requirements. Fed. R. App. P. 32(a)(5)-(6); Fed. R. App. P. 27(d)(2).

DATED: June 28, 2024

/s/ Jared J. Thompson

Jared J. Thompson
Natural Resources Defense Council
40 West 20th Street
New York, NY 10011
(202) 513-6249
jared.thompson@nrdc.org

CERTIFICATE OF SERVICE

I certify that on this 28th day of June, 2024, the foregoing Motion to Intervene and attachments was filed with the electronic case filing (ECF) system of the U.S. Court of Appeals for the D.C. Circuit, which will provide electronic notice to all counsel of record.

DATED: June 28, 2024

/s/ Jared J. Thompson

Jared J. Thompson
Natural Resources Defense Council
40 West 20th Street
New York, NY 10011
(202) 513-6249
jared.thompson@nrdc.org

ORAL ARGUMENT NOT YET SCHEDULED

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

AMERICAN WATER WORKS ASSOCIATION, and ASSOCIATION OF METROPOLITAN WATER AGENCIES, *Petitioners*, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, and MICHAEL S. REGAN, in his official capacity as Administrator, United States Environmental Protection Agency, *Respondents*.	No. 24-1188 consolidated with Nos. 24-1191, 24-1192

APPENDIX TO MOTION OF NATURAL RESOURCES DEFENSE COUNCIL TO INTERVENE IN SUPPORT OF RESPONDENTS

DATED: June 28, 2024

Respectfully submitted,

/s/ Jared J. Thompson

Jared J. Thompson
Natural Resources Defense Council
40 West 20th Street
New York, NY 10011
(202) 513-6249
jared.thompson@nrdc.org

Erik Olson
Natural Resource Defense Council
1152 15th Street NW, Suite 300
Washington, DC 20005
(202) 289-2415
eolson@nrdc.org

Karen Chen
Natural Resources Defense Council
111 Sutter Street, 21st Floor
San Francisco, CA 94104
(415) 875-8261
kchen@nrdc.org

Counsel for Natural Resources Defense Council

TABLE OF CONTENTS

DECLARATION OF PAUL AMES

I, Paul Ames, declare as follows:

1. I am a member of the Natural Resources Defense Council (NRDC). I have supported NRDC since the 1980s. I participated in the first Earth Day in 1970 and became interested in environmental issues not because of one specific concern, but rather because of the growing understanding that pollution is rampant. To protect ourselves, we have to be proactive and persistent about addressing bioaccumulative toxins in the environment. I have long been concerned about and continue to be concerned about drinking water contamination.

2. I live in Bellport, New York, on Long Island. I have lived in my current home since 1980. I receive water from the Suffolk County Water Authority.

3. Before I retired six years ago, I spent 45 years working for the Public & Environmental Health Laboratory of Suffolk County's Division of Environmental Quality. I first spent 20 years as a chemist there, then switched to information management at the lab. We analyzed seawater and drinking water samples and worked with the Water Authority to trace the origin of pollutants.

4. The Water Authority has previously detected PFAS in various wells within their network and in the drinking water supply. They found the PFAS came from several airports in the area including at Westhampton and Islip, as well as the Firematics Training Center, where the firefighting foam they used for practice had

PFAS in it. Land on Long Island is very sandy, so the chemicals flow right down into the aquifer. Additionally, since PFAS are in so many things—pizza boxes, storage containers, and more—much of it ends up in the waste stream. Because landfill leaching is a chronic problem, many of these PFAS in the waste stream percolate into the surface water and groundwater.

5. For people on Long Island, the sole source of drinking water is the aquifers. When contaminants are detected in their wells, the Water Authority can either stop using those wells or dilute the water with other, less contaminated water until it meets the applicable maximum contaminant levels (MCLs). Addressing the contamination in the aquifers can require extensive remediation, using granulated activated carbon filters, or other measures.

6. When we first moved to our home in Bellport in 1980, we used water from our own private well. We had to switch in the mid-80s because the well was contaminated with chemicals including trichloroethylene by a neighboring laundromat. At one point we had bottled water delivery, but after some research I concluded that our tap water was likely safer, given the microplastics that bottled water can contain.

7. Just as with microplastics, I am concerned about PFAS contamination in drinking water. I believe that the many toxic chemicals out there—chlorinated compounds, brominated compounds, now PFAS—have synergistic effects on

human health. For example, my wife was recently diagnosed with cancer of the blood and had to go through chemotherapy; while we can't pinpoint the cause of her cancer, how can you rule out any one thing?

8. I am aware that PFAS are bioaccumulative toxins, meaning that once they are in your system, they don't go away. In general, I try to be careful about what I eat and drink, and I opt for organic and unprocessed foods in order to reduce the amounts of pesticides in my food and in the environment. I have considered home filtration of my drinking water, but opted not to because it is expensive, time consuming, and reverse osmosis wastes a lot of water. I am aware that the Water Authority conducts testing for PFAS and rely on them to safeguard the water supply on our behalf.

9. I think it is beneficial that the U.S. Environmental Protection Agency (EPA) recently signed a new rule setting enforceable limits on six PFAS chemicals in drinking water. Previously the Water Authority has mostly monitored PFAS as unregulated contaminants without enforceable limits and compared the results to a generic threshold. Also, a few years ago New York State set enforceable limits on two PFAS chemicals, PFOA and PFOS, in drinking water. But additional and more stringent federal drinking water standards will be more effective. I understand that PFAS are a ubiquitous problem, with many sources and the need for a comprehensive approach to address the resulting drinking water contamination. A

patchwork of local or state regulations won't work as well as a nationwide standard.

10. I support NRDC helping to defend EPA's new rule. We should support the standards that EPA puts out, and we need advocacy organizations to help coordinate efforts to protect the environment. Since I rely on the Water Authority to provide safe drinking water, I'd have more peace of mind knowing there are federal PFAS standards being implemented without delay. Treating water is expensive so water systems will generally only do what is required by law. It's important for there to be federal safe drinking water regulations to set the proper MCLs and require ongoing monitoring for compliance.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 15, 2024.

Paul Ames

DECLARATION OF RANDALL DAIL, JR.

I, Randall Dail, Jr., declare as follows:

1. I am a member of the Natural Resources Defense Council (NRDC). I have been a member of NRDC since January 2021.

2. I believe that everybody should have safe drinking water and support NRDC's actions related to that cause. I try to stay informed locally and nationally, and I have done a lot of reading and watched a lot of documentaries about PFAS and related topics. I also receive messages from NRDC and a newsletter from a local environmental group, North Carolina Conservation Network.

3. I live in Shallotte, a town in Brunswick County, NC. I've spent five years at my current address, and I've been in Brunswick County for 20 years.

4. Brunswick County Public Utilities runs the water system here. My entire time in Brunswick County I have used water from them.

5. I'm very upset about the PFAS situation here and have been for the past several years. I am aware that the main culprit of the water contamination for parts of North Carolina and where I live is the Chemours Co. (DuPont) Fayetteville Works facility located along the Cape Fear River that produced and used PFAS. Once we learned about the problem, we bought bottled water to drink, but I'm not sure if bottled water is much better.

6. I get an annual water quality report from Brunswick County, and I know the County's tests have shown there's PFAS in the water. But different sources and reports can be hard to follow. Some say that the levels are acceptable, and at other times the levels are bad. It's also hard to know what to do: boil, use filtration, or what? It's unclear what works.

7. As a retired commercial plumbing contractor, I did some research on filtration systems. Our refrigerator has a charcoal filter, but that doesn't remove any PFAS. A good home reverse osmosis system costs thousands of dollars, and most people don't have that to spare. I heard that the County was going to build a reverse osmosis water filtration plant because of the PFAS, so I figured it wasn't worth installing one at home. But the construction date for that plant keeps getting delayed, and it's still not done.

8. Recently the public utility separated the water and sewer billing, so we pay sewer every two months and water every month. The water bill has tripled to pay for the water filtration plant that's in construction. It's adding insult to injury to be paying for reverse osmosis that has not been installed.

9. I have an autoimmune disease and am uncomfortable with the possibility of continued PFAS exposure. My father lives 10 minutes away and was diagnosed with prostate cancer after living here for over 10 years. He has multiple sclerosis, had to have his prostate removed, and has a compromised immune

system. If you look at the list of things linked to PFAS exposure, those health effects are on it. My father has talked to some medical providers about it and has signed onto a class action lawsuit about his cancer caused by exposure to PFAS. I'm worried about what PFAS has done and will do to me, my wife, and my family, and I believe even if you're healthy you have to be concerned.

10. I am aware that the U.S. Environmental Protection Agency (EPA) recently signed a new rule setting enforceable limits on six PFAS chemicals in drinking water. I understand that EPA expects these limits will provide significant health benefits by avoiding PFAS exposures through drinking water.

11. I support NRDC helping to defend EPA's new rule. I believe the rule is a good start to addressing the PFAS problem. While I will still be worried about all the unregulated PFAS chemicals out there, I will feel a little better about the safety of the water knowing the six PFAS are regulated. I wouldn't mind more water quality reports and I think lots of people would like to see that. It would make me feel good as a consumer to know EPA is requiring extra monitoring and treatment where the water exceeds the PFAS limits. People should not have to worry about what's in their drinking water, everybody should have safe, potable water.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 13th, 2024.

Randall Dail, Jr.

Randall Dail, Jr.

DECLARATION OF T. MICHAEL HARRISON

I, T. Michael Harrison, declare as follows:

1. I am a member of the Natural Resources Defense Council (NRDC). I have been a member of NRDC continuously since 2004.

2. I live in Midland Park, New Jersey and have been in my current apartment for seven years.

3. I have been following drinking water issues loosely since the 1990s, and actively since the 2000s. I have researched my water supplier and various water filter manufacturers, read news reports, and received information from advocacy groups including NRDC. I am enthusiastic about clean air and water rules, so I donate regularly to organizations like NRDC, and have signed onto various petitions and letters urging EPA to do something about PFAS in drinking water.

4. I am aware that a wide range of health effects are associated with PFAS exposure and am worried about long term effects from exposure, such as potential damage to the kidneys and liver.

5. My water supplier, Ridgewood Water, has not been in compliance with New Jersey state PFAS limits for a long time. For the past five years I have received mailers, three or four times a year, saying there's PFAS in the water, they are not in compliance with the state's PFAS limits, and they are working on it.

Knowing that PFAS chemicals are in the water is scary. Yet nothing seems to change. It feels like they're kicking the can down the road and have no sense of urgency. I don't understand the lack of urgency; everyone in the community drinks the same water and there shouldn't be two sides to this issue.

6. When I first moved into my apartment seven years ago, I had a PUR filter and was making my own seltzer. I was alarmed as soon as the first notice about PFAS contamination from Ridgewood Water came in and felt that it was already one too many. For a while I started buying bottled seltzer instead of making it at home, but I didn't like all the plastic bottles.

7. After researching filter options, to try to protect myself, I bought and installed a reverse osmosis system to filter the water coming out of my kitchen tap. I paid about $200 for the reverse osmosis system initially, and I have to buy new filter cartridges for it periodically. I also purchase Varify at-home drinking water test strips to check for various contaminants in my water, which show a big difference between filtered and unfiltered water. The filtered and unfiltered water taste different, too. Because my filter only protects my kitchen sink, I am concerned about PFAS exposures from water not treated by my reverse osmosis system, for example in my bathroom sink and shower.

8. I would have preferred to purchase a higher-end model to filter all of the water in the apartment. As a renter, however, I was limited in the changes I

could make to my unit. It is an unfortunate reality that I had to compromise, to the possible detriment of my health.

9. I am aware that the U.S. Environmental Protection Agency (EPA) recently signed a new rule setting enforceable limits on six PFAS chemicals in drinking water. I understand that EPA expects these limits will provide significant health benefits by avoiding and reducing PFAS exposures through drinking water.

10. I support NRDC helping to defend EPA's new rule. I am aware that the rule provides several years for systems to come into compliance, and that it only addresses six PFAS chemicals out of thousands. Ridgewood Water was supposed to get in compliance with the New Jersey PFAS standards years ago, and those standards aren't even as strong as the ones in the new EPA rule. The continued delay in addressing the PFAS problem is upsetting to me. The new rule is a step in the right direction, and I believe it's important for it to be implemented as soon as possible.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 14, 2024.

T. Michael Harrison

DECLARATION OF ROBERT SAUERHOFF

I, Robert Sauerhoff, declare as follows:

1. I am a member of the Natural Resources Defense Council (NRDC) and have been a member since 1999. For a long time I've been an environmental advocate. I donate monthly to NRDC and several other environmental organizations and I have signed petitions and participated in actions related to drinking water issues.

2. I live in Bridgeport, Connecticut and have lived here for 34 years.

3. I get water from Aquarion Water Company. My understanding is that our water comes from a series of reservoirs, and I am concerned about toxics contamination because of the history of industrial activity in Connecticut. The Housatonic River, which neighbors Bridgeport, has been home to many manufacturing facilities and there are many Superfund sites along it.

4. I learned about PFAS seven or eight years ago from environmental organizations like NRDC. I am aware PFAS are "forever chemicals" and do not break down in the environment. PFAS have had a role in many processes across many industries, including lining containers, nonstick cooking equipment, and Teflon tapes and cookware. I understand that PFAS gets into water because of runoff from manufacturing or spills.

5. I know that PFAS exposure is associated with many health effects. I think a lot of the ailments people suffer from are because of chemicals that persist in our bodies that affect us on a biological level. I am especially worried about certain health effects that may be linked to PFAS, such as Alzheimer's disease and dementia.

6. Because of these concerns, I have taken a number of preventative measures to ameliorate risk from PFAS exposure. For example, I only use ceramic or stainless steel cookware, and I got rid of all the Teflon cookware we once used.

7. About 10 years ago, I purchased a whole-house activated carbon filtration system that filters water right at the street level. I purchased the system in part due to my concern about my late wife's emphysema and a desire to minimize her exposure to toxic things in our house. The activated carbon system filters all of the water in our house, and it appears to do a generally good job at filtering the water, although I am unsure whether it filters PFAS. The system cost about $700 to install, and I spend about $100 to change out the filter every few years.

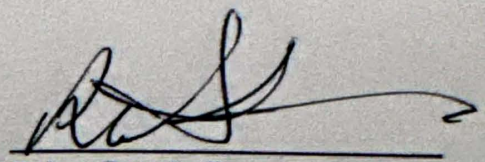
8. I am not aware of any PFAS testing or treatment being done by Aquarion Water, although I intend to do some investigation about PFAS in my water system. I would feel safer knowing that Aquarion Water is doing its due diligence in ensuring the water it provides is free of PFAS and other harmful chemicals.

9. I was really pleased to learn that the U.S. Environmental Protection Agency (EPA) recently signed a new rule setting enforceable limits on six PFAS chemicals in drinking water. I am aware that some European countries have regulated PFAS and I find it disturbing that it took EPA this long to follow suit. Although I know there are many other PFAS chemicals besides the six listed in the new rule, I feel that it is an important start. I hope that EPA will further strengthen the standards and expand the rules to include other PFAS chemicals. If EPA's new rule were to be delayed or stopped, I would be really upset and concerned about industry profits taking precedence over public health.

10. I support NRDC helping to defend EPA's new rule, and I would benefit from it being upheld and implemented without delay. It would make me feel more confident in the safety of my water knowing that there is required monitoring and treatment for PFAS.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 16, 2024.



Robert Sauerhoff

DECLARATION OF ERIN STEPHENS

I, Erin Stephens, declare as follows:

1. I am a member of the Natural Resources Defense Council (NRDC). I knew that more environmental advocacy had to be done after the administration change in 2016. I became a member of NRDC around two years ago.

2. I live in Pensacola, Florida and have lived there since 2007. Around five years ago, I moved into the home I am currently living.

3. My awareness of PFAS became heightened around six years ago. I learned about it by reading the local news, such as InWeekly and the Pensacola News Journal, national publications such as Politico, and from environmental groups. However, even before the term PFAS came to my knowledge, I had been concerned for many years about the notoriously bad water supply in Pensacola. I know that there is significant residential, commercial and industrial runoff into Carpenter Creek nearby, plus a high amount of fecal coliform bacteria and E. coli detected in the watershed.

4. Pensacola frequently experiences storms, heavy rainfall and flooding which disperses contaminants. The contaminants can then seep through the soil and pollute the groundwater. Also, nearby Pensacola Beach and Pensacola Bay were among the most severely impacted areas by the Deepwater Horizon oil spill in 2010. Water, wildlife and the white beaches were coated with oil. The long-term

effects from the toxic Corexit dispersants, used to break down the oil, possibly made the environmental impact worse.

5. There are many military and aviation facilities in the Pensacola area. I personally do not live right next to a military facility, however, there are many a few miles away to the west, northeast and east of me and I live close to a busy commercial airport. I understand that military bases and airports use aqueous film forming foams (AFFF), used for firefighting testing and training exercises, that contain PFAS. These are among the reasons I am concerned about PFAS in my water. I have read news articles and scientific studies that found military bases and airports leaking forever chemicals into neighboring communities and the environment.

6. Emerald Coast Utilities Authority (ECUA) handles water and sewer services in Pensacola. ECUA draws its water from sand and gravel aquifers, and I am worried that this source water is contaminated from residential, commercial or industrial runoff. In 2018, ECUA sued the manufacturers and suppliers of AFFF in response to contamination found in four of the area's water wells due to the usage of these highly toxic chemicals at a defunct naval air station and the city's airport.

7. Before I moved to Pensacola, the city was always on lists of areas with poor water quality, so I knew that water filtration was something I needed to consider. I use a PUR pitcher filter daily to proactively take care of my health.

8. I started filtering my drinking water before I became aware of PFAS. Still, I am worried about PFAS exposure and associated health effects. I don't know if the PUR pitcher can filter out all PFAS and I don't know how much PFAS is in the unfiltered water I use, including at the bathroom tap and shower. I do know PFAS chemicals do not break down, accumulate in the body, and that all PFAS are linked to negative health impacts including asthma, birth defects, cardiovascular risk, higher cholesterol, liver and kidney damage, lower antibody response to vaccines, lower fertility, preeclampsia, thyroid disease and several forms of cancer.

9. I am aware that the U.S. Environmental Protection Agency (EPA) recently signed a new rule setting enforceable limits on six PFAS chemicals in drinking water. When I first heard about the rule from NRDC and the various environmental organizations I support, my initial reaction was that it felt like progress that was long overdue. I don't necessarily trust the powers that be to protect my health; however, a rule like this will encourage me to gain trust in the water quality and will reduce strain caused by the unknown of the long-term effects of PFAS exposure.

10. I understand that EPA expects these limits will provide significant health benefits by avoiding PFAS exposures through drinking water. I support

NRDC helping to defend EPA's new rule, and my community and I will benefit from the rule being upheld and implemented without delay.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 20, 2024.

Erin Stephens

DECLARATION OF GINA TRUJILLO

I, Gina Trujillo, declare as follows:

1. I am the Director of Membership at the Natural Resources Defense Council, Inc. (NRDC). I have been in that position since January 1, 2015, and I have worked at NRDC in the membership department for more than 30 years.

2. My duties include supervising the preparation of materials that NRDC distributes to members and prospective members. Those materials describe NRDC and identify its mission.

3. NRDC is a membership organization incorporated under the laws of the State of New York. It is recognized as a not-for-profit corporation under section 50l(c)(3) of the United States Internal Revenue Code. NRDC's headquarters are located at 40 West 20th Street, New York, NY 10011.

4. NRDC's mission statement declares that "The Natural Resources Defense Council's purpose is to safeguard the Earth: its people, its plants and animals, and the natural systems on which all life depends." NRDC works to ensure the rights of all people to clean air, clean water, and healthy communities. NRDC's mission includes protecting the health and safety of NRDC's members by reducing and preventing exposure to toxic chemicals, including PFAS chemicals, and by ensuring the safety of drinking water.

5. NRDC is committed to ensuring that all communities have access to clean and affordable drinking water. NRDC has encouraged EPA to adopt strict limits on chemicals in drinking water, advocated for improvements to drinking water infrastructure nationwide, and brought suit to enforce existing drinking water regulations.

6. Over many years, NRDC has called on EPA to regulate PFAS in industrial water discharges, ensure Superfund cleanups and management of hazardous wastes with PFAS, ban new uses of PFAS, and require data collection and disclosures about PFAS in drinking water.[1] NRDC has extensively researched the prevalence of and advocated for limits on PFAS in drinking water. For instance, NRDC has delivered testimony to Congress several times about the dangers of PFAS contamination in drinking water.[2] NRDC has also produced multiple reports on PFAS contamination in several states, along with policy recommendations.

---

[1] *See* Erik D. Olson, Presentation at EPA PFAS National Leadership Summit (May 22, 2018), https://epa.gov/sites/default/files/2018-05/documents/nrdc-olson-pfass-final.pdf.

[2] Perfluorinated Chemicals in the Environment: An Update on the Response to Contamination and Challenges Presented: Hearing Before the Subcomm. on Energy, 115th Cong. 103 (2018) (Statement of Erik D. Olson, Senior Strategic Director for Health and Food, NRDC); Protecting Americans at Risk of PFAS Contamination & Exposure: Hearing Before the Subcomm. on Env't and Climate Change, 116th Cong. 66 (2019) (Statement of Erik D. Olson, Health Program Director, NRDC); Trusting the Tap: Upgrading America's Drinking Water Infrastructure: Hearing Before the Subcomm. on Env't and Climate Change, 117th

7. NRDC uses scientific and technical information concerning toxic chemicals—including data on drinking water contaminants required to be reported by public water systems under the Safe Drinking Water Act—to further its mission. NRDC does this by informing its members about health risks so that they can take action to protect themselves and their families and by advocating for states and the federal government to issue and enforce strong limits on drinking water contaminants to protect public health, including the health of NRDC's members.

8. Protecting human health by ensuring that EPA's regulation of PFAS in drinking water is implemented without delay is a paradigmatic example of NRDC's efforts to safeguard drinking water.

9. When an individual becomes a member of NRDC, his or her current residential address is recorded in NRDC's membership database. When a member renews his or her membership or otherwise makes a contribution to NRDC, the database entry reflecting the member's residential address is verified or updated.

10. NRDC currently has approximately 483,972 members. There are NRDC members residing in each of the fifty United States and in the District of Columbia and Puerto Rico.

Cong. (March 29, 2022) (Testimony of Erik D. Olson, Senior Strategic Director for Health and Food, NRDC).

11. When an individual becomes a member of NRDC, he or she authorizes NRDC to take legal action on his or her behalf to protect the environment and public health.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on June 26, 2024.

Gina Trujillo

DECLARATION OF NICOLE VANDAL

I, Nicole Vandal, declare as follows:

1. I am a Litigation Paralegal at the Natural Resources Defense Council, Inc. (NRDC).

2. I am aware that the U.S. Environmental Protection Agency (EPA) promulgated the *PFAS National Primary Drinking Water Regulation*, which was published in the Federal Register at 89 Fed. Reg. 32,532 (April 26, 2024) and set maximum contaminant levels (MCLs) for six per- and polyfluoroalkyl substances (PFAS): perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), hexafluoropropylene oxide dimer acid (HFPO‑DA, commonly known as GenX), and perfluorobutane sulfonic acid (PFBS).

3. I am aware that EPA's individual MCLs for these PFAS chemicals are as follows: (a) PFOA: 4.0 nanograms/Liter (ng/L) or parts per trillion (ppt); (b) PFOS: 4.0 ppt; (c) PFHxS: 10 ppt; (d) PFNA: 10 ppt; and (e) GenX: 10 ppt.

4. I am aware that EPA's Hazard Index MCL for mixtures of PFHxS, PFNA, GenX, and/or PFBS is calculated as follows, where brackets ([]) indicate the concentration of a PFAS chemical in drinking water: HI MCL = ([GenX ppt]/10 ppt) + ([PFBS ppt]/2000 ppt) + ([PFNA ppt]/10 ppt) + ([PFHxS ppt]/10 ppt) = 1.

5. I was asked to compile and summarize the most recent available data on PFAS concentrations that have been reported to the general public by the water systems serving the NRDC members who are submitting declarations in this matter. To do so, I downloaded the most recent Consumer Confidence Report (CCR) from each water system and any other readily available self-reported PFAS data on the water system's website.

6. Attached as **Exhibit A** is a true and correct copy of the 2023 Water Quality Report for the Aquarion Water Company, Bridgeport Main System, PWS ID #CT0150011, which I downloaded from https://www.aquarionwater.com/docs/default-source/water-quality/water-quality-reports/ct/2023/bridgeportmain_ccr_2023.pdf?sfvrsn=64d7a1bc_7. To the best of my knowledge and belief, this is the most recent publicly available CCR for the water system that serves NRDC member Robert Sauerhoff.

7. Attached as **Exhibit B** is a true and correct copy of the 2023 Water Quality Report for the Brunswick County Water System, PWS ID # NC0410045, which I downloaded from https://www.brunswickcountync.gov/DocumentCenter/View/4891/CCR-2023?bidId=. To the best of my knowledge and belief, this is the most recent publicly available CCR for the water system that serves NRDC member Randall Dail, Jr.

8. Attached as **Exhibit C** is a true and correct copy of the 2023 Water Quality Report for the Emerald Coast Utilities Authority, PWS ID # FL1170525, which I downloaded from https://assets.ecua.fl.gov/2023-CCR-Web.pdf?mtime=20240508095353**.** To the best of my knowledge and belief, this is the most recent publicly available CCR for the water system that serves NRDC member Erin Stephens.

9. Attached as **Exhibit D** is a true and correct copy of the 2023 Water Quality Report for Ridgewood Water, PWS ID # NJ0251001, which I downloaded from https://water.ridgewoodnj.net/wp-content/uploads/2023/06/B2510-Ridgewood-water-dept-2023_3.pdf. To the best of my knowledge and belief, this is the most recent publicly available CCR for the water system that serves NRDC member T. Michael Harrison.

10. I found that Ridgewood Water also issues PFAS Quarterly Public Notices, which are available at https://water.ridgewoodnj.net/pfas-resources/. Attached as **Exhibit E** is a true and correct copy of Ridgewood Water's most recent PFAS Quarterly Public Notice, dated April 8, 2024, which I downloaded from https://water.ridgewoodnj.net/wp-content/uploads/2024/04/Q1-2024-PFAS-Quarterly-Public-Notification.pdf.

11. Attached as **Exhibit F** is a true and correct copy of the 2024 Water Quality Report for the Suffolk County Water Authority (SCWA), PWS ID #

NY5110526, which I downloaded from http://s1091480.instanturl.net/dwqr2024/water-quality-report-2024-scwa%20index_051524.html. To the best of my knowledge and belief, this is the most recent publicly available CCR for the water system that serves NRDC member Paul Ames. I am aware that Mr. Ames lives in Bellport, NY, which is part of SCWA Water Distribution Area 1 on the map on page 2 of this document.

12. In Table 1 below, I compiled the average PFAS concentrations for the six PFAS covered by the EPA Rule that are reported in the water system CCRs described in paragraphs 7-12 above. None of these water systems reported a Hazard Index value. I calculated the Hazard Index column values using data from the other columns and the formula in paragraph 5 above if data were available for at least two of the four PFAS chemicals covered by the Hazard Index. For water systems that did not report monitoring data for all four PFAS chemicals covered by the Hazard Index, these calculations may underestimate the actual Hazard Index. Shaded cells contain values that exceed the applicable MCL value. “ND” indicates not detected. “UCMR 5” is the Unregulated Contaminant Monitoring Rule 5.

Table 1. Summary of average PFAS concentrations reported in CCRs for selected public water systems serving NRDC members.

	Most recent CCR Average PFAS Chemical Concentrations (ppt)						
PWS Name & ID No.	**PFOA** (MCL 4.0 ppt)	**PFOS** (MCL 4.0 ppt)	**PFHxS** (MCL 10 ppt)	**PFNA** (MCL 10 ppt)	**GenX** (MCL 10 ppt)	**PFBS**	**Hazard Index** (MCL 1)
Aquarion Water Co. of Conn. – Main System (CT0150011)	ND < 2	ND < 2	Not reported	Not reported	Not reported	Not reported	Not reported
Brunswick County Water System (NC0410045)	5.67	10.16	4.18	0.662	3.695	4.69	0.856*
Emerald Coast Utilities Authority (FL1170525)	4.9	6.0	4.7	0.6	Not reported	1.9	0.531*
Ridgewood Water (NJ0251001)	34.8	16.6	10.9	2.32	Not reported	4.53	1.324*
Suffolk County Water Authority, Distribution Area 1 (NY5110526) (regulated and unregulated PFAS monitoring and UCMR 5 data)	ND	ND	ND	ND	Not Reported	ND	Not reported

* Indicates Hazard Index was calculated from other available data.

13. In Table 2 below, I compiled the maximum PFAS concentrations for the six PFAS covered by the EPA Rule that are reported in the water system CCRs listed in paragraphs 7-12 above. None of these water systems reported a Hazard Index value. I calculated the Hazard Index column values using data from the other columns and the formula in paragraph 5 above if data were available for at least two of the four PFAS chemicals covered by the Hazard Index. For water systems that did not report monitoring data for all four PFAS chemicals covered by the

Hazard Index, these calculations may underestimate the actual Hazard Index. Shaded cells contain values that exceed the applicable MCL value. "ND" indicates not detected. "UCMR 5" is the Unregulated Contaminant Monitoring Rule 5.

Table 2. Summary of maximum PFAS concentrations reported in CCRs for selected public water systems serving NRDC members.

	Most recent CCR Maximum PFAS Chemical Concentrations (ppt)						
PWS Name & ID No.	**PFOA** (MCL 4.0 ppt)	**PFOS** (MCL 4.0 ppt)	**PFHxS** (MCL 10 ppt)	**PFNA** (MCL 10 ppt)	**GenX** (MCL 10 ppt)	**PFBS**	**Hazard Index** (MCL 1)
Aquarion Water Co. of Conn. – Main System (CT0150011)	11	7	Not Reported	Not Reported	Not Reported	4	Not reported
Brunswick County Water System (NC0410045)	10.2	14.3	7.69	0.987	15.3	9.14	2.402*
Emerald Coast Utilities Authority (FL1170525)	25.8	35.7	55.3	16.2	Not Reported	16	7.158*
Ridgewood Water (NJ0251001)	34.8	16.6	10.9	2.32	Not Reported	4.53	1.324*
Suffolk County Water Authority, Distribution Area 1 (NY5110526) (regulated and unregulated PFAS monitoring and UCMR 5 data**)	6	35	13	6	Not Reported	4	1.902*

* Indicates Hazard Index was calculated from other available data.
** For Suffolk County, this table shows the maximum concentration in any of the monitoring results reported in the CCR.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on June 27, 2024.

Nicole Vandal

Exhibit A

AQUARION Water Company

Stewards of the Environment™

2023 WATER QUALITY REPORT

IN THIS REPORT

Este informe contiene información importante sobre su agua potable. Pida a alguien que lo traduzca para usted, o hable con alguien que lo entienda.

A31

Letter from the President

Donald J. Morrissey
Aquarion President

Dear Aquarion Customer:

I am pleased to share that in 2023 Aquarion Water Company continued its commitment in delivering high-quality water to our valued customers. Over 174,000 tests conducted across our water systems confirmed that our water consistently meets or surpasses both state and federal water quality standards.

In 2024, the U.S. Environmental Protection Agency (EPA) is expected to announce new maximum contaminant standards for perfluoroalkyl and polyfluoroalkyl substances (PFAS) levels for public water systems. Aquarion has been working hard planning for the investment that will be required to comply with these new regulations. To keep customer rates affordable, Aquarion is seeking federal and state funding in addition to pursuing settlements with the companies that manufactured these chemicals.

As part of the Lead and Copper Rule Revisions (LCRR), we are also developing an inventory of Aquarion-owned and customer-owned service lines to identify lead service lines in our service area. This inventory marks the initial phase of our efforts to eliminate any lead service lines in our water systems.

Lastly, thank you for your ongoing commitment to water conservation. Given the unpredictable shifts in precipitation, last year's abnormally wet weather could well be replaced by drier weather this year. For some helpful conservation tips, please check out page 8 in this report or visit www.aquarionwater.com/conserve.

With Appreciation,

Donald J. Morrissey

Areas Served by **Bridgeport Main System**

Questions About Your Water Quality Report?

Customers who have questions about water quality should call us at **800-832-2373**.

For discolored water, service problems or after-hours emergencies, or to participate in a public meeting, call **800-732-9678**.

Customers may also email us at **waterquality@aquarionwater.com**, or visit **www.aquarionwater.com**.

Connecticut Department of Public Health Drinking Water Section: **860-509-7333** or **www.ct.gov/dph**.

U.S. Environmental Protection Agency's Safe Drinking Water Hotline: **800-426-4791** or **www.epa.gov/safewater**.

Water Quality Table

Your water has been tested for more than 100 compounds that are important to public health. Only 15 of these were detected, all of which were below the amounts allowed by state and federal law. Most of these compounds are either naturally occurring or introduced as treatment to improve water quality. Monitoring frequency varies from daily to once every nine years per EPA regulation, depending on the parameter. Our testing encompasses the full range of regulated inorganic, organic and radiological compounds and microbiological and physical parameters. Results shown here are for detected compounds only.

SUBSTANCE (Units of Measure)	LIKELY SOURCE	MCLG	MCL	COMPLIANCE	TEST DATE	AVERAGE	RANGE
INORGANIC COMPOUNDS							
Barium (ppm)	Erosion of natural deposits	2	2	YES	2020, 2023	0.013	0.012 - 0.054
Copper (ppm)	Corrosion of household plumbing systems	1.3	AL = 1.3	YES	2023	0.14♦	
Fluoride (ppm)	Water additive that promotes strong teeth; erosion of natural deposits	4.0	4.0	YES	2023	0.68	0.58 - 0.95
Lead (ppb)	Corrosion of household plumbing systems	0	AL = 15	YES	2023	2♦♦	
Nitrate (ppm)	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	10	10	YES	2023	0.274	0.069 - 1.555
MICROBIALS							
Turbidity (NTU)	Sediment particles; naturally occurring iron and manganese; soil runoff	NA	TT = 1 max	YES	2023	0.05§	0.02 - 0.36
Turbidity (NTU)	Sediment particles; naturally occurring iron and manganese; soil runoff	NA	TT = 95% of samples < 0.3	YES	2023	99.5%	
DISINFECTANT							
Chlorine (ppm)	Water additive used to control microbes	MRDLG = 4	MRDL = 4	YES	2023	0.72	ND < 0.05 - 2.20
ORGANIC COMPOUNDS							
Haloacetic Acids 5 (ppb)	By-product of drinking water chlorination	NA	60	YES	2023	38+	2 - 47
Total Organic Carbon [TOC]	Naturally present in the environment	NA	TT Removal Ratio > 1#	YES	2023	1.4	1.2 - 1.7
Total Trihalomethanes (ppb)	By-product of drinking water chlorination	NA	80	YES	2023	69+	30 - 87

Continued on page 4

For a list of terms used in this table, please see the glossary on page 9 of this report.

Water Quality Table - Continued from page 3

SUBSTANCE (Units of Measure)	LIKELY SOURCE	MCLG	MCL	COMPLIANCE	TEST DATE	AVERAGE	RANGE
STATE-REQUIRED TESTING — PHYSICAL CHARACTERISTICS^							
Color (CU)	Natural organic matter such as decaying leaves; naturally occurring iron and manganese	NA	15	YES	2023	2	1 - 7
pH	Naturally occurring; water treatment processes	NA	6.4 - 10.0	YES	2023	7.4	6.3 - 9.0
Turbidity (NTU)	Sediment particles; naturally occurring iron and manganese; soil runoff	NA	5	YES	2023	0.16	ND < 0.05 - 2.00
STATE-REQUIRED TESTING — INORGANIC COMPOUNDS							
Chloride (ppm)	Naturally present in the environment	NA	250	YES	2020, 2023	32.6	25.7 - 48.4
Sodium (ppm)	Water treatment processes; use of road salt; naturally present in the environment	NA	NL = 28	NA	2020, 2023	23.3	19.7 - 36.7
Sulfate (ppm)	Naturally present in the environment	NA	SMCL = 250	NA	2020, 2023	20.6	11.7 - 25.8

FOOTNOTES

◆ 90th percentile value in copper monitoring. Result is representative of customer sampling stagnant water. No locations exceeded the action level for copper. Highest 90th percentile value shown.

◆◆ 90th percentile value in lead monitoring. Result is representative of customer sampling stagnant water. No locations exceeded the action level for lead. Highest 90th percentile value shown.

§ Value is the highest monthly average for turbidity reported from the surface water treatment plant effluent. Values in the range are individual measurements.

The monthly TOC removal ratio is calculated as the ratio between the actual TOC removed and the TOC rule removal requirements. This number should be greater than 1.

^ Measured at representative locations within the distribution system.

+ Value is the highest locational annual average of quarterly measurements for disinfection byproducts in the distribution system. Values in the range are individual measurements.

HEALTH EFFECTS
Sodium: If you have been placed on a sodium-restricted diet, please inform your physician that our water may contain as much as 36.7 ppm of sodium.

Public Notification We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Due to a scheduling error during the January 2021 to December 2023 monitoring period, we did not monitor for inorganic compounds (IOCs)* at the Coleytown and Westport wells and therefore cannot be sure of the quality of the drinking water from these wells during that time. The Coleytown and Westport wells provided only 3% of the total supply for the Bridgeport Main system in 2023.

This was not an emergency and there is nothing you need to do at this time. These wells are used seasonally and IOC samples will be collected once the wells are turned on for the 2024 season.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

* Inorganic compounds (IOCs) include antimony, arsenic, barium, beryllium, cadmium, chloride, chromium, cyanide, fluoride, mercury, nickel, selenium, silver, sodium and thallium.

For a list of terms used in this table, please see the glossary on page 9 of this report.

Other Monitored Substances

Hardness in Your System

Hardness is a measure of naturally-occurring minerals, like calcium and magnesium, dissolved in the water. Hardness does not have any negative health effects, so it is not regulated by the EPA or the Connecticut Department of Public Health (CTDPH). These minerals can create a buildup on fixtures and appliances. Please refer to fixture and appliance manufacturer recommendations on addressing buildup.

HARDNESS (gpg)	
TEST DATE	2023
AVERAGE	3.5
RANGE	2 - 6
SOURCE	Erosion of natural deposits

Monitoring Unregulated Contaminants

As required by EPA, our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a public health protection standard. For additional information about these unregulated contaminants, please contact our Water Quality Department at 800-832-2373 or visit EPA's UCMR website at epa.gov/dwucmr.

SUBSTANCE (Units of Measure)	DETECTED LEVEL			
UNREGULATED CONTAMINANTS	**TEST DATE**	**AVERAGE**	**RANGE**	**SOURCE OF CONTAMINANT**
PFBA (ppt)	2023	ND < 2	ND < 2 - 8	Discharges and emissions from industrial sources; manufacturing and use of consumer products.
PFHpA (ppt)	2023	ND < 2	ND < 2 - 4	
PFHxA (ppt)	2023	ND < 2	ND < 2 - 7	
PFOA (ppt)	2023	ND < 2	ND < 2 - 11	
PFOS (ppt)	2023	ND < 2	ND < 2 - 7	
PFPeA (ppt)	2023	ND < 2	ND < 2 - 7	
PFBS (ppt)	2023	ND < 2	ND < 2 - 4	

For a list of terms used in this table, please see the glossary on page 9 of this report.

Your Health Is Our Priority

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

Here is some additional information of interest about Aquarion's drinking water.

Where Does Your Water Come From?

Your water is collected in reservoirs and wells, treated, and delivered to you through an extensive underground piping system. The Bridgeport Main System serves about 368,000 people in Bridgeport and nearby communities, including Easton, Fairfield, Monroe, Newtown, Norwalk, Redding, Shelton, Stratford, Trumbull, Westport, Weston and Wilton. The supply is mostly surface water drawn from a system of eight reservoirs (Aspetuck, Easton Lake, Far Mill, Hemlocks, Means Brook, Saugatuck, Trap Falls and West Pequonnock). The reservoirs supply more than 97% of the 43.9 million gallons per day that customers use on average. Water also is drawn from Aquarion Water Company's Westport and Coleytown well fields.

How Is Your Water Treated?

The reservoir water is filtered at our Trap Falls water treatment plant in Shelton, at our Easton Lake plant in Easton, and at our Warner plant in Fairfield. Water from the Westport and Coleytown wells is filtered naturally underground. All the water is disinfected, fluoridated, and further treated to protect the distribution system.

Cryptosporidium

The EPA requires public water systems that use surface water sources to monitor for Cryptosporidium. This is a microbial pathogen found in lakes and rivers throughout the U.S. that can cause gastrointestinal illness if consumed. Aquarion continues to monitor its surface water sources and did not detect Cryptosporidium in the reservoirs that served the Bridgeport Main System in 2023.

Source Water Assessment Report

CTDPH states in its Source Water Assessment Report that the public drinking water sources in the Bridgeport Main System have a low-to-moderate susceptibility to potential contamination. To read the CTDPH report, visit www.ct.gov/dph.

Copper

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level* over a relatively short period of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their doctor.

Major sources of copper in drinking water include corrosion of household plumbing systems and erosion of natural deposits.

* The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. EPA/Centers for Disease Control and Protection guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791.

Lead in Drinking Water: The Facts

The EPA and CTDPH have established extensive regulations for water utilities to follow regarding lead. If lead is present in drinking water, it can cause numerous harmful effects on a person's health. The EPA has determined there is no safe level of lead.

Aquarion maintains a regular schedule for lead monitoring.

Health Effects

Lead is especially harmful for infants and young children, causing developmental delays, learning difficulties, irritability, loss of appetite, weight loss, sluggishness, fatigue, abdominal pain, vomiting, constipation and hearing loss.

Effects on adults may include high blood pressure, abdominal pain, constipation, joint pains, muscle pain, decline in mental functions such as abstract thinking and focus, numb or painful extremities, headache, memory loss, mood disorders, fertility issues in men, and miscarriage or premature birth in pregnant women.

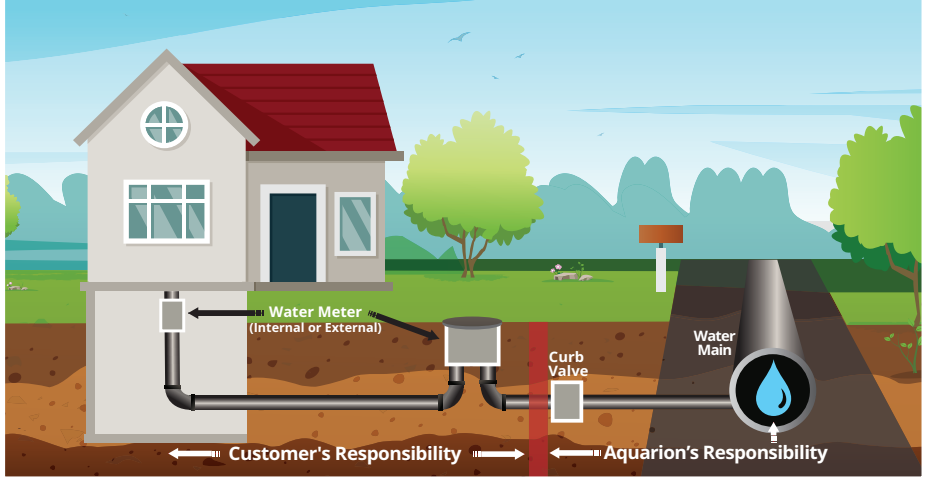
The EPA's Advice

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing. Aquarion Water Company is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components.

Customers can minimize the potential for lead exposure when water has been sitting for several hours by running the tap for 3 to 5 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested.

What to Do About Lead in a Service Line

A service line is the pipe that connects a customer's premises to Aquarion's water main in the street (see diagram on page). Homes built before 1986 may have lead service lines (with a few exceptions, most were installed in homes built before 1930), and those built before 1986 may have lead solder and brass fittings (which may have a lead content).



Customer and Aquarion responsibilities shown are representative for most customers.

A lead service line can be the primary source of lead in your drinking water, because there is a much greater surface area where lead contacts the water, compared to lead-soldered pipe joints and leaded brass fixtures. If your house or other structure was built prior to 1988, you should check the service line where it enters the wall of your basement to see if it is made of lead. If it is a lead line, contact Aquarion at 800-732-9678 for advice on replacing it.

This will help reduce your potential exposure to lead in drinking water.

Other Precautions You Can Take

There are other ways to reduce the risk of lead exposure from your water pipes:

- ✔ If you have not used any of your faucets for a number of hours (for example, overnight or while you are at work), run the water for 3 to 5 minutes. This will bring in fresh water from our water main, which contains no lead.
- ✔ Always use cold water for drinking, cooking and preparing baby formula.
- ✔ Periodically remove and clean the faucet screens/aerators. While doing so, run the tap to eliminate debris.

Aquarion offers more detailed information on lead in drinking water and how to minimize exposure on our website at www.aquarionwater.com/learnaboutlead. You also can call the Safe Drinking Water Hotline at 800-426-4791 or go to www.epa.gov/safewater/lead.

Water Protection and Conservation

How Aquarion Protects Your Drinking Water

Aquarion Water Company is committed to providing the highest quality water to our customers. Toward that end, we conducted 174,119 water quality tests in 2023 across all our Connecticut systems, and we regularly inspect businesses, farms, homes and other sites that could affect our water supply.

Here are some examples of pollutants that may wash into surface water or seep into groundwater:

- Microbial contaminants from septic systems
- Inorganic contaminants such as road salt or metals
- Pesticides and herbicides from residential uses
- Organic chemical contaminants, including synthetic and volatile organic chemicals

You Can Protect Water Too:

- Ensure that your septic system works correctly
- Use chemicals and pesticides sparingly
- Dispose of waste chemicals and used motor oil properly
- Report illegal dumping, chemical spills or other polluting activities to the state Department of Energy and Environmental Protection's 24-hour hotline at 860-424-3338, call Aquarion at 800-732-9678, or call your local police

Conservation

By reducing water consumption, Aquarion customers have made outstanding progress in ensuring that our area has enough water, no matter what the skies deliver. Many thanks to all the customers who cut back on outdoor sprinkler irrigation and other uses, helping to save approximately 5 billion gallons of water across our systems over the last six years. There's still more to do, though. Here are some easy tips on what everyone can do to conserve the supply of this irreplaceable resource:

Reduce excessive irrigation
Use a WaterSense labeled smart irrigation controller that adjust watering schedules based on weather conditions, soil moisture levels, and plant requirements.

Rely more on the sky
Put a rain barrel under a down-spout to capture rainwater for your garden.

Forget fertilizing
Many use salts that make your lawn less drought-resistant.

Apply mulch
Adding a layer of mulch around your plants helps retain moisture, reducing the need to water as often.

Remedy a leaky toilet
Watch our step-by-step video at www.aquarionwater.com about finding and fixing leaks. Better yet, upgrade to a new, WaterSense labeled model to save three or more gallons with every flush.

For more tips, visit www.aquarionwater.com/conserve.

Glossary | These terms may appear in your report.

Definitions

< - Less than

> - Greater than

90th Percentile - Out of every 10 homes sampled, 9 were at or below this level. This number is compared to the action level to determine lead and copper compliance.

AL - Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

CU - Color Units

gpg - grains per gallon

MCL - Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG - Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL - Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG - Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

NA - Not Applicable

ND - Not Detected

NL - State of Connecticut customer **notification level**

NTU - Nephelometric Turbidity Units, a measure of the presence of particles. Low turbidity is an indicator of high-quality water.

pCi/L - picocuries per liter

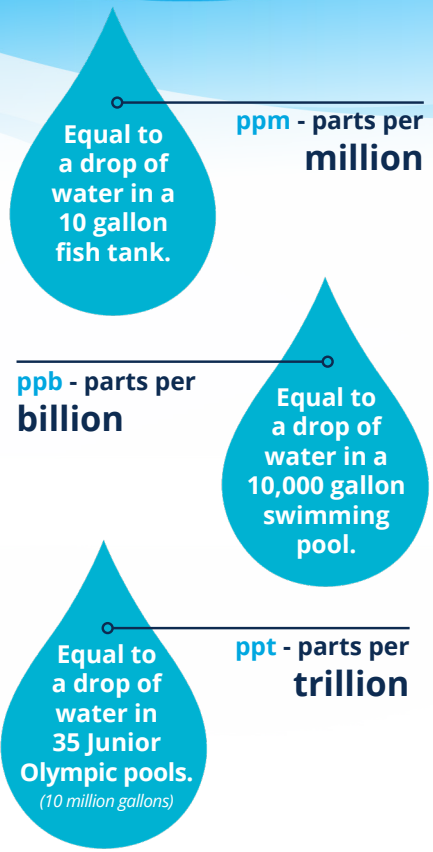
ppb - parts per billion, or micrograms per liter (ug/L)

ppm - parts per million, or milligrams per liter (mg/L)

ppt - parts per trillion, or nanograms per liter (ng/L)

SMCL - Secondary Maximum Contaminant Level

TT - Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.



FREE Admission Tickets

Be sure to take advantage of the special 2-for-1 ticket deals and other offers that Aquarion has arranged for its customers at great Connecticut attractions. Learn more at www.aquarionwater.com/freetickets.

Exhibit B

2023

BRUNSWICK COUNTY PUBLIC UTILITIES

WATER QUALITY REPORT

250 Grey Water Road, Supply, NC 28462
Phone: 910.253.2657, Option 1
Email: utilityadmin@brunswickcountync.gov

Helpful Contact Information

Billing Questions
(910) 253-2655, Option 2

Water Emergencies
8:00 AM to 4:30 PM
(910) 253-2657, Option 1

After Hours Emergencies
4:30 PM to 8:00 AM
(910) 755-7921
(910) 371-3490
(910) 454-0512

Northwest Water Treatment Plant
(910) 371-3490

211 Water Treatment Plant
(910) 454-0512

Backflow Prevention Questions
(910) 253-2457

Lead and Copper Questions
(910) 253-1997

EPA Safe Drinking Water Hotline
1-800-426-4791

Brunswick County Public Utilities is pleased to share its 2023 annual water quality report. Our water system has enjoyed unprecedented growth over the past several years and we are proud to serve the wonderful community that we work and live in. Brunswick County Public Utilities continuously works to meet and/or exceed all state and federal water quality standards. Our dedicated staff regularly tests water from the source to your tap to ensure its quality.

During the 2023 calendar year, staff sampled over 200 constituents in the water supply. Compounds, such as GenX and other Perfluoroalkyl Substances (PFAS), have become a more significant issue as regulations continue to develop and more is understood regarding their health impacts. On April 10, 2024 the Environmental Protection Agency (EPA) announced the final National Primary Drinking Water Regulation for six PFAS. The EPA established legally enforceable levels, also known as Maximum Contaminant Levels (MCLs), for PFOA, PFOS, PFHxS, PFNA, and HFPO-DA (GenX), and for PFAS mixtures containing at least two or more of PFHxS, PFNA, HFPO-DA, and PFBS. More information can be found by visiting https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas.

Brunswick County Public Utilities is in the fourth year of construction building a Low-pressure Reverse Osmosis (LPRO) water treatment addition at the Northwest Water Treatment Plant which, when completed, will be able to meet and/or exceed the requirements of current and future PFAS regulations. LPRO is the most advanced treatment technology available to remove GenX and other contaminants from the water supply. Visit https://www.brunswickcountync.gov/nwtp for more information on the LPRO plant addition currently under construction.

On the left of this page, please take note of the helpful contact information such as the billing and emergency after hours phone numbers.

As always, we are here to serve so please do not hesitate to reach out if you have questions or comments.

Regards,

John Nichols, PE, CSPEC
Public Utilites Director

Glenn Walker
Water Resources Manager

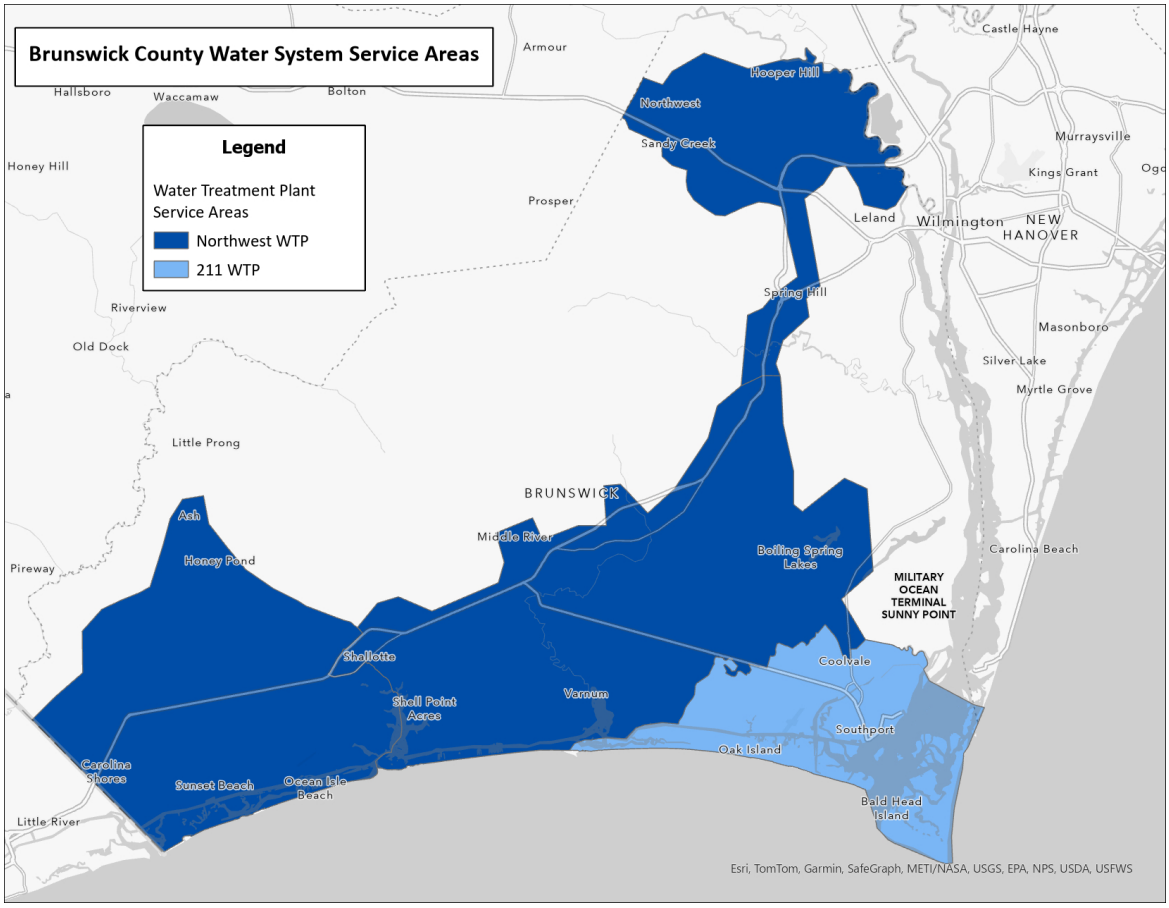
CONTENT

Brunswick County Public Utilities is here to serve you twenty-four (24) hours a day. If you plan to dig, please call 811 or visit www.NC811.org to request utility locates. If you have billing questions, please call Customer Service at 910-253-2655, Option 2. For water quality concerns or questions about the function of your meter, please contact our office at (910) 253-2657, Option 1; we will be glad to work with you to solve any water issues. If you have questions about your backflow device or need it inspected, please call (910) 253-2457.

FIND YOUR SERVICE AREA

Brunswick County operates two water treatment plants (WTP); the Northwest WTP and the Highway 211 WTP, commonly referred to as the 211 WTP. The Northwest WTP is a 24 million gallon per day (MGD) surface water treatment plant that treats raw water from the Cape Fear River. The 211 WTP is a 6 MGD groundwater water treatment plant that sources its water from groundwater wells.

The data tables on pages 8 through 12 provide water quality data for the two water treatment plants and the distribution system. All of Brunswick County's water customers and wholesale water customers* receive either all or part of their water from the Northwest WTP. Within the Southport, St. James, Oak Island, and Caswell Beach areas, water from the Northwest WTP is blended with water from the 211 WTP to serve customers. Bald Head Island has its own treatment plant, but supplementary water is supplied by the 211 WTP, or blended water from both Brunswick County plants. All other customers in the County receive their water solely from the Northwest WTP.



*As of June 2023, Brunswick County's current wholesale customers include Bald Head Island, Holden Beach, Oak Island, Ocean Isle Beach, Shallotte, and Southport.

QUICK FACTS!

The total Brunswick County water system capacity is 30 MGD.

The greatest one day system demand in 2023 was 25.64 MGD on May 13th!

SOURCES OF DRINKING WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants are anything in the water other than the water molecule. Contaminants that may be present in source water include **microbial contaminants,** such as viruses and bacteria, which may come from wildlife, sewage treatment plants, septic systems, and agricultural livestock operations; **inorganic contaminants,** such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges; **radioactive material** from oil and gas production, mining, or farming; **pesticides and herbicides,** which typically come from agricultural operations; and **chemicals,** which are often by-products of industrial processes.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

THE NC SOURCE WATER ASSESSMENT PROGRAM (SWAP)

The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information, and a relative susceptibility rating of Higher, Moderate, or Lower.

The relative susceptibility rating of each source for Brunswick County was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The most recent assessment findings (September 2020) are summarized in the table below.

SUSCEPTIBILITY OF SOURCES TO POTENTIAL CONTAMINANT SOURCES (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
Cape Fear River	Moderate	Sept. 10, 2020
Well #1, 2, 15, 16, 17	Lower	Sept. 10, 2020
Well #3, 8, 11, 12, 12A, 18, 19	Moderate	Sept. 10, 2020
Well # 5, 6A	Higher	Sept. 10, 2020

The complete SWAP Assessment Report for the Brunswick County Water System may be viewed on the Web by typing the following address into your browser https://www.ncwater.org/?page=600 then enter 0410045. To obtain a printed copy of this report please contact the Source Water Assessment Staff by phone at (919) 707-9098.

It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the systems' potential to become contaminated by PCSs in the assessment area.

NORTHWEST WATER TREATMENT PLANT

The Northwest WTP takes water from the Cape Fear River above Lock and Dam #1 in Bladen County through a contract with Lower Cape Fear Water and Sewer Authority (LCFWASA). Brunswick County Public Utilities, Cape Fear Public Utility Authority, and Pender County Public Utilities are all customers of LCFWASA. Brunswick County Public Utilities is the contract operator of the raw water pump station at LCFWASA.

Area Wide Optimization Program (AWOP): The Northwest WTP participates in this program designed to optimize water system operations and water quality by closely monitoring filter effluent turbidity and microbial results in the WTP. NCDEQ and the EPA have established a turbidity goal of <0.10 ntu, this is one third of the mandated 0.3 ntu required by the Safe Drinking Water Act. The water treatment plant has met this goal five out of the last eight years.

Northwest WTP Expansion Update: Brunswick County Public Utilities continues to work with CDM Smith to advance the construction of needed water treatment plant improvements for the removal of PFAS contaminants. Oscar Renda Contracting company is currently working on upgrades and plant construction. Major elements include expansion of the existing treatment process from 24 MGD to 48 MGD and the addition of 36 MGD minimum of LPRO plus the necessary ancillary equipment to ensure it all works together. More detailed information about the LPRO design, water quality results, and steps we are taking to secure our water future can be found on the Brunswick County website at: https://www.brunswickcountync.gov/583/Gen-X-PFAS-Information. Pictured below is an updated overhead shot of the construction site.

STAFF UPDATES!

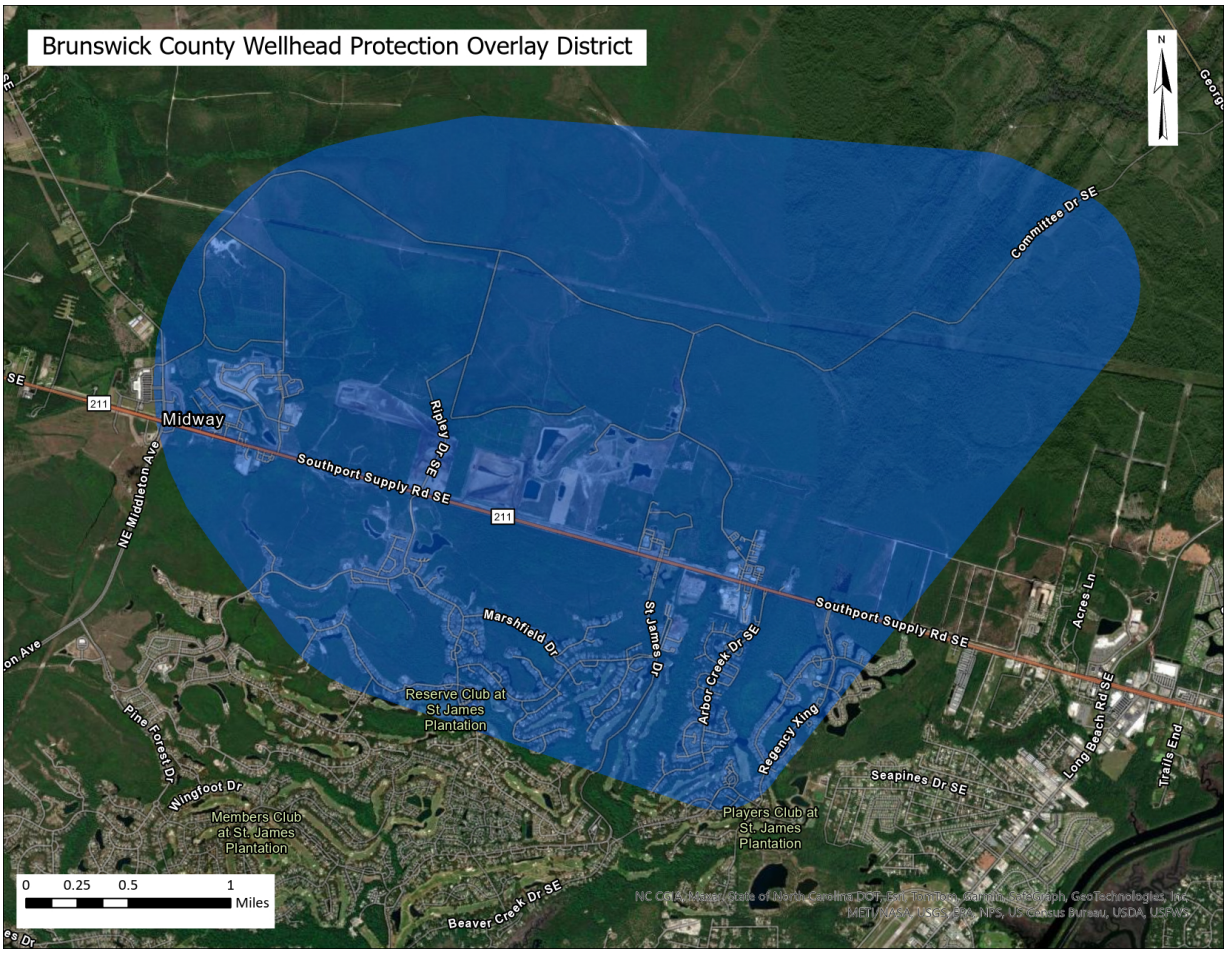
Congratulations to Jason Ashcraft for attaining their B-Surface Water Treatment certification and Jay Booth for receiving both their Maintenance I and C-Surface Water Treatment certifications.

The facility would like to welcome Jesse Horne as new water treatment plant operator.

211 WATER TREATMENT PLANT

The 211 Water Treatment Plant is a 6 MGD groundwater treatment plant. The raw water is sourced from 14 water supply wells drilled to approximately 175 feet into the Castle Hayne Aquifer. The facility utilizes a lime softening process to remove excess calcium and iron from the well water.

The Brunswick County Planning Department and County Utilities Staff have developed a Wellhead Protection Area (WPA) Overlay Zoning District. This district can be seen in the map below. The purpose of the WPA overlay district is to protect public water supply wells in the area by minimizing man-made impacts to the soils above the aquifer. For more information on Wellhead Protection please visit https://www.deq.nc.gov/about/divisions/water-resources/drinking-water/drinking-water-protection-program.



STAFF UPDATES!

Congratulations to Bryan Morris for attaining their A-Well Water Treatment certification, Tracy Flack and Shane Manuel for attaining their C-Well Water Treatment certifications, and Kenny Revels for attaining their B-Surface Water Treatment certification.

The facility would like to welcome Kenneth Osborne as a new water treatment plant operator.

WATER QUALITY RESULTS FOR 2023

Terms and abbreviations used in the Water Quality results tables.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water as set by the EPA. MCLs are set as close to the MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.

Action Level (AL): The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Locational Running Annual Average (LRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

ppm-mg/L: parts per million or milligrams per liter

ppb-ug/L: parts per billion or micrograms per liter

ppt-ng/L: parts per trillion or nanograms per liter

pCi/l: Picocuries per liter (a measure of radiation)

MGD: million gallons a day

Y/N: Yes/No

N/A: not applicable

Important notes for the Water Quality results tables.

- Unregulated contaminants are those which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.
- Unregulated Contaminant Monitoring Rule 5 (UCMR 5) sampling at the Northwest WTP and 211 WTP was completed in calendar year 2023. For more information on UCMR 5 please visit: https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule.

QUICK FACTS!
In 2023 BCPU staff installed approximately 28 miles of water mains to increase the total to 1,237.6 miles of water main.

NORTHWEST WATER TREATMENT PLANT ANALYSIS

Listed below are the results of water quality sampling performed from January 1, 2023, to December 31, 2023

For questions and comments please contact: Thaddeus Hill, Water Resources Superintendent at (910) 371-3490 or thad.hill@brunswickcountync.gov

Regulated Organic Chemicals	EPA's MCL	EPA's MCLG	Brunswick County Amount Detected	Range Low	Range High	Violation Y/N	Source of Contaminant
Turbidity	Treatment Technique Limit of 1.0 ntu	N/A	0.05	% of samples ≤ 0.3 ntu		N	Soil Runoff
			0.22	100.0%			
Raw Water TOC	Treatment Technique Removal Ratio ≥1 (Step 1)	N/A	Average Removal Ratio 1.098	0.864	1.308	N	Naturally Present in the Environment
Finish Water TOC		N/A					
Total Organic Carbon (TOC)		N/A					
pH	6.8 - 8.5	N/A	7.6	7.6	7.8	N	By-Product of Caustic Addition
Regulated Inorganic Chemicals	**EPA's MCL**	**EPA's MCLG**	**Brunswick County Amount Detected**	**Range Low**	**Range High**	**Violation Y/N**	**Source of Contaminant**
Chlorite	1.0 ppm	0.8 ppm	Average 0.61 ppm	0.52	0.66	N	By-Product of Disinfection
Chlorine Dioxide	0.8 ppm	0.8 ppm	Average 0.54 ppm	0.49	0.61	N	Water Additive Used to Control Microbes
Fluoride	4 ppm	4 ppm	Average 0.71 ppm	0	0.84	N	Water Additive which Promotes Strong Teeth
Orthophosphate	17 ppm	N/A	Average 1.54ppm	1.42	2.10	N	Water Additive Used to Control Corrosion
Total Chlorine	4 ppm	4 ppm	Average Minimum 3.08 ppm	2.87	3.40	N	Water Additive Used to Control Microbes
Monochloramine Disinfectant Residual	4 ppm	4 ppm	2.87 ppm	0	3.09	N	Water Additive Used to Control Microbes
Unregulated Substances*	**EPA's MCL**	**EPA's MCLG**	**Brunswick County Amount Detected**	**Range Low**	**Range High**	**Violation Y/N**	**Source of Contaminant**
1, 4 Dioxane	Non Regulated	N/A	Average 1.009 ppb	0.22	3.1	N	Purifying Agent in Pharmaceuticals and By-Product of PET Plastic Production
Hardness	Non Regulated	N/A	Average 30.6 ppm	26.7	44.00	N	Part of the Treatment Process, Erosion of Natural Deposits
Iron	Non Regulated	N/A	Average 0.01 ppm	0	0.06	N	Part of the Treatment Process, Erosion of Natural Deposits
Manganese	Non Regulated	N/A	0.01 ppm	0.01	0.08	N	Part of the Treatment Process, Erosion of Natural Deposits
Free Ammonia	Non Regulated	N/A	0.094 ppm	0	0.141	N	Water Additive Used to Control Microbes
Sodium	Non Regulated	N/A	20.4 mg/L	N/A		N	Part of the Treatment Process, Erosion of Natural Deposits

QUICK FACTS!

BCPU laboratory staff collected 1,260 samples in 2023 for bacteriological testing. At the Northwest WTP lab, 14 different laboratory tests are performed weekly. This equals a total of 728 tests performed in 2023!

FINISHED WATER PFAS RESULTS FOR 2023

PFAS Substances-Unregulated	EPA's MCL	EPA's MCLG	Brunswick County Samples (Avg)	Range Low	Range High	Violation Y/N	Source of Contaminant
PFBA	Non Regulated	N/A	4.903	1.91	11.3	N	By-Product of Chemical Manufacturer
PFPeA	Non Regulated	N/A	7.782	2.49	17.6	N	By-Product of Chemical Manufacturer
PFHxA	Non Regulated	N/A	7.133	2.18	13.1	N	By-Product of Chemical Manufacturer
PFHpA	Non Regulated	N/A	3.128	1.35	5.43	N	By-Product of Chemical Manufacturer
PFOA	Non Regulated	N/A	5.67	2.26	10.2	N	By-Product of Chemical Manufacturer
PFNA	Non Regulated	N/A	0.662	0.461	0.987	N	By-Product of Chemical Manufacturer
PFDA	Non Regulated	N/A	0.32	0.112	0.505	N	By-Product of Chemical Manufacturer
PFUnDA	Non Regulated	N/A	0.064	0.015	0.144	N	By-Product of Chemical Manufacturer
PFDoDA	Non Regulated	N/A	0.021	0.021	0.021	N	By-Product of Chemical Manufacturer
PFTrDA	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
PFTeDA	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
PFHxDA	Non Regulated	N/A	0.112	0.05	0.206	N	By-Product of Chemical Manufacturer
PFBS	Non Regulated	N/A	4.69	1.408	9.14	N	By-Product of Chemical Manufacturer
PFPeS	Non Regulated	N/A	0.657	0.328	1.01	N	By-Product of Chemical Manufacturer
PFHxS	Non Regulated	N/A	4.18	0.974	7.69	N	By-Product of Chemical Manufacturer
PFHpS	Non Regulated	N/A	0.184	0.041	0.31	N	By-Product of Chemical Manufacturer
PFOS	Non Regulated	N/A	10.16	5.03	14.3	N	By-Product of Chemical Manufacturer
PFNS	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
PFDS	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
4:2 FTS	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
6:2FTS	Non Regulated	N/A	0.3	0.006	2.3	N	By-Product of Chemical Manufacturer
8:2 FTS	Non Regulated	N/A	0.005	0.004	0.324	N	By-Product of Chemical Manufacturer
10:2 FTS	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
FBSA	Non Regulated	N/A	0.4	0.057	1.05	N	By-Product of Chemical Manufacturer
N-EtFOSA	Non Regulated	N/A	0.371	0.249	0.548	N	By-Product of Chemical Manufacturer
N-EtFOSAA	Non Regulated	N/A	0.706	0.001	1.44	N	By-Product of Chemical Manufacturer
N-EtFOSE	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
N-MeFOSA	Non Regulated	N/A	0.014	0.014	0.014	N	By-Product of Chemical Manufacturer
N-MeFOSAA	Non Regulated	N/A	0.021	0.004	0.041	N	By-Product of Chemical Manufacturer
N-MeFOSE	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
PFOSA	Non Regulated	N/A	0.076	0.007	0.526	N	By-Product of Chemical Manufacturer
Nafion Byproduct 1	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
Nafion Byproduct 2	Non Regulated	N/A	0.316	0.055	1.04	N	By-Product of Chemical Manufacturer
ADONA	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
EVE Acid	Non Regulated	N/A	0.273	0	0.717	N	By-Product of Chemical Manufacturer
HFPO-DA	Non Regulated	N/A	3.695	0.644	15.3	N	By-Product of Chemical Manufacturer
Hydro-EVE Acid	Non Regulated	N/A	0.407	0.006	3.68	N	By-Product of Chemical Manufacturer
NFDHA	Non Regulated	N/A	0.011	0.009	0.013	N	By-Product of Chemical Manufacturer
PEPA	Non Regulated	N/A	1.879	0.444	4.51	N	By-Product of Chemical Manufacturer
PFECA-G	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
PFMOAA	Non Regulated	N/A	17.11	2.39	37.2	N	By-Product of Chemical Manufacturer
PFMOBA	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
PFMOPrA	Non Regulated	N/A	0.137	0.005	0.341	N	By-Product of Chemical Manufacturer

PFAS results are continued on the next page

FINISHED WATER PFAS RESULTS FOR 2023 (continued)

PFAS Substances-Unregulated	EPA's MCL	EPA's MCLG	Brunswick County Samples (Avg)	Range Low	Range High	Violation Y/N	Source of Contaminant
PFO2HxA	Non Regulated	N/A	4.287	0.736	9.64	N	By-Product of Chemical Manufacturer
PFO3OA	Non Regulated	N/A	1.287	0.383	3.04	N	By-Product of Chemical Manufacturer
PFO4DA	Non Regulated	N/A	0.367	0.073	0.504	N	By-Product of Chemical Manufacturer
PFO5DA	Non Regulated	N/A	0.069	0.04	0.1	N	By-Product of Chemical Manufacturer
PMPA	Non Regulated	N/A	5.97	1.38	13.4	N	By-Product of Chemical Manufacturer
R-EVE Acid	Non Regulated	N/A	5.155	1.05	14	N	By-Product of Chemical Manufacturer
11Cl-PF3OUdS	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
9Cl-PF3ONS	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
Hydrolyzed PSDA	Non Regulated	N/A	3.064	0.267	15.1	N	By-Product of Chemical Manufacturer
NVHOS	Non Regulated	N/A	1.153	0.265	2.04	N	By-Product of Chemical Manufacturer
PFEESA	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer
R-PSDA	Non Regulated	N/A	3.33	1.02	7.79	N	By-Product of Chemical Manufacturer
R-PSDCA	Non Regulated	N/A	0	N/A	N/A	N	By-Product of Chemical Manufacturer

211 GROUNDWATER TREATMENT PLANT ANALYSIS

Listed below are the results of water quality sampling performed from January 1, 2023, to December 31, 2023

For questions and comments please contact: Jeremy Sexton, Water Treatment Plant Superintendent at (910) 253-2488 or jeremy.sexton@brunswickcountync.gov

Unregulated Substances	EPA's MCL	EPA's MCLG	Brunswick County Samples (Avg)	Range Low	Range High	Violation Y/N	Source of Contaminant
Turbidity	Non Regulated	N/A	Average 0.48 ntu	0.04	8.9	N	Part of the Treatment Process, Erosion of Natural Deposits
pH	Non Regulated	N/A	N/A	7.2	9.1	N	Part of the Treatment Process
CO2	Non Regulated	N/A	7.0 ppm	3	17	N	Part of the Treatment Process
Alkalinity	Non Regulated	N/A	45 ppm	27	187	N	Part of the Treatment Process, Erosion of Natural Deposits
Hardness	Non Regulated	N/A	126 ppm	40	233	N	Part of the Treatment Process, Erosion of Natural Deposits
Iron	Non Regulated	N/A	0.03 ppm	0	0.53	N	Part of the Treatment Process, Erosion of Natural Deposits
Chloride	Non Regulated	N/A	22 ppm	19	27	N	Part of the Treatment Process, Erosion of Natural Deposits
Free Ammonia	Non Regulated	N/A	0.04 ppm	0	0.2	N	Water Additive Used to Control Microbes
Regulated Inorganic Chemicals	**EPA's MCL**	**EPA's MCLG**	**Brunswick County Samples (Avg)**	**Range Low**	**Range High**	**Violation Y/N**	**Source of Contaminant**
Flouride	4 ppm	4 ppm	0.82 ppm	0.14	1.8	N	Water Additive Used to Promote Strong Teeth
Orthophosphate	17 ppm	N/A	1.03 ppm	0.36	2.8	N	Water Additive Used to Control Corrosion
Total Chlorine	4 ppm	4 ppm	2.4 ppm	1.1	3.7	N	Water Additive Used to Control Microbes
Monochloraime	4 ppm	4 ppm	2.73 ppm	1.4	3.5	N	Water Additive Used to Control Microbes

DISTRIBUTION SYSTEM ANALYSIS

Listed below are the results of water quality sampling performed from January 1, 2023, to December 31, 2023

For questions and comments please contact: Mickey Thompson, Water Distribution Superintendent at (910) 253-2404 or mickey.thompson@brunswickcountync.gov

Lead and Copper	Action Level (AL)	MCLG	Brunswick County Amount Detected	Number of Samples Above Action Level	Exceedence of the Action Level? Y/N	Source of Contaminant
Copper 90th Percentile 6/11/20 to 9/30/20	1.3 ppm	1.3 ppm	0.1872 ppm	0	N	Corrosion of Household Plumbing
Lead 90th Percentile 6/11/20 to 9/30/20	0.015 ppm	0 ppm	0.003 ppm	0	N	Corrosion of Household Plumbing

Organic Chemicals TTHM and HAA	EPA's MCL	EPA's MCLG	Brunswick County Amount Detected	Range Low	Range High	Violation Y/N	Source of Contaminant
Location BO1 TTHM	LLRA 80 ppb	N/A	45.7 ppb	36	53	N	By-Product of Disinfection
Location BO2 TTHM	LLRA 80 ppb	N/A	41.7 ppb	25	53	N	By-Product of Disinfection
Location BO3 TTHM	LLRA 80 ppb	N/A	40 ppb	25	49	N	By-Product of Disinfection
Location BO4 TTHM	LLRA 80 ppb	N/A	44.2 ppb	31	54	N	By-Product of Disinfection
Location BO5 TTHM	LLRA 80 ppb	N/A	41 ppb	26	52	N	By-Product of Disinfection
Location BO6 TTHM	LLRA 80 ppb	N/A	37.7 ppb	28	47	N	By-Product of Disinfection
Location BO7 TTHM	LLRA 80 ppb	N/A	38.7 ppb	21	52	N	By-Product of Disinfection
Location BO8 TTHM	LLRA 80 ppb	N/A	36.5 ppb	22	43	N	By-Product of Disinfection
Location BO1 HAA	LLRA 60 ppb	N/A	17.7 ppb	8	26	N	By-Product of Disinfection
Location BO2 HAA	LLRA 60 ppb	N/A	24.2 ppb	22	27	N	By-Product of Disinfection
Location BO3 HAA	LLRA 60 ppb	N/A	23.5 ppb	21	27	N	By-Product of Disinfection
Location BO4 HAA	LLRA 60 ppb	N/A	24.7 ppb	21	30	N	By-Product of Disinfection
Location BO5 HAA	LLRA 60 ppb	N/A	24 ppb	19	33	N	By-Product of Disinfection
Location BO6 HAA	LLRA 60 ppb	N/A	12.7 ppb	2	25	N	By-Product of Disinfection
Location BO7 HAA	LLRA 60 ppb	N/A	22.2 ppb	19	27	N	By-Product of Disinfection
Location BO8 HAA	LLRA 60 ppb	N/A	24.5 ppb	20	30	N	By-Product of Disinfection

Regulated Inorganic Chemicals	EPA's MCL	EPA's MCLG	Brunswick County Amount Detected	Range Low	Range High	Violation Y/N	Source of Contaminant
Chlorite	1.0 ppm	0.8 ppm	Average 0.54 ppm	0.49	0.64	N	By-Product of Disinfection
Nitrate	10 ppm	10 ppm	1.32 ppm	N/A		N	By-Product of Disinfection

Pesticide, Volatile, and Synthetic Organic Chemicals	There were no regulated pesticides, volatile, or synthetic organic chemicals detected in the distribution system (beyond those listed above) for the 2023 sample period

Microbiological Contaminants	EPA's MCL	EPA's MCLG	Numer of Positive/Present Samples	Range Low	Range High	Violation Y/N	Source of Contaminant
Total Coliforms Bacteria Present or Absent	TT*	N/A	0	N/A		N	Naturally Present in Environment

*If a system collecting 40 or more samples per month finds greater than 5% of monthly samples are positive in one month, an assessment is required.

NOTICE TO THE PUBLIC TIER III

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the compliance period specified in the table below, we did not complete all monitoring or testing for the contaminants listed and therefore cannot be sure of the quality of your drinking water during that time.

CONTAMINANT GROUP	FACILITY ID NO./SAMPLE POINT ID	COMPLIANCE PERIOD BEGIN DATE	NUMBER OF SAMPLES/SAMPLING FREQUENCY	WHEN SAMPLES WERE TAKEN
HAA5/TTHM	04-10-045	Jan. 1, 2024	8- Quarterly	June 2024
TOC	04-10-045	Jan. 1, 2024	1- Monthly	Feb. 2, 2024

What happened? The required TOC sample was not collected for the month of January 2024. The TTHM/HAA sample was collected in February 2024, however it was collected too early in the compliance period.

What contaminants are involved?

- **(HAA5)-** Haloacetic Acids- include Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, Dibromoacetic Acid.
- **(TOC)-** Total Organic Carbon- includes testing for Alkalinity, Dissolved Organic Carbon (DOC), Total Organic Carbon (TOC) and Ultraviolet Absorption 254 (UV254). Source water samples must be tested for both TOC and Alkalinity. Treated water samples must be tested for TOC. Source water samples and treated water samples must be collected on the same day.
- **(TTHM)-** Total Trihalomethanes- include Chloroform, Bromoform, Bromodichloromethane, and Dibromochloromethane.

What should I do? There is nothing you need to do at this time.

What is being done? A TOC sample was collected the following month (February 2024) to bring the water treatment plant back into compliance. The next TTHM/HAA sample will be collected in June of 2024 to bring the system back into compliance.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information about this violation, please contact Thad Hill at (910) 371-3490 or via email at thad.hill@brunswickcountync.gov.

DID YOU KNOW?

Brunswick County wants you to know about potential household lead and copper contamination.

Although there is no Maximum Contaminant Level (MCL) established for lead or copper, the federal government establishes an "action level" (AL) that prompts specific measures by the water supplier. The AL is determined based on the 90th percentile, requiring that 90 percent of the samples fall at or below the designated AL. For copper, the AL is set at 1.3 parts per million (ppm), while for lead, it is 15 parts per billion (ppb).

The consumption of lead-contaminated water by infants and children may result in hindered physical or cognitive development. In children, it can lead to minor impairments in both physical and mental growth, including potential limitations in attention span and learning capabilities. Prolonged consumption of such water by adults may contribute to the development of kidney issues or hypertension.

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Brunswick County Public Utilities provides high-quality drinking water but cannot control the variety of materials used in plumbing components. When your tap water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes, before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at http://www.epa.gov/safewater/lead.

Copper

Although copper is an essential nutrient, individuals who consume water with copper levels exceeding the designated action level within a relatively short period may encounter gastrointestinal discomfort. Moreover, prolonged consumption of water surpassing the action level for copper over many years could potentially lead to liver or kidney damage. If you have Wilson's Disease, it is advisable to consult your personal doctor. If you have concerns about copper levels in your water, it is recommended to consider testing it. The safe drinking water hotline at 1 (800) 426-4791 or the website http://www.epa.gov/safewater/lead can provide information regarding copper in drinking water, testing methods, and steps you can take to minimize exposure.

How does Brunswick County prevent and monitor for lead and copper in our drinking water?

- We don't use lead service lines between the distribution pipes and our water meters.
- We have an active corrosion control and prevention plan that requires us to feed a corrosion inhibitor (orthophosphate) and to monitor the residual daily at the water plants and weekly in the distribution system.
- Brunswick County building codes have required plumbing materials to be low or free of lead since 1987.

- We monitor lead and copper in homes that were built before 1987 and may be at higher risk for exposure due to susceptible plumbing materials (copper pipe with lead solder joints) at least every three years.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Drinking water, whether from tap or bottled sources, originates from a variety of natural sources such as rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water flows across the land's surface or seeps through the ground, it naturally acquires minerals and, in certain instances, radioactive elements through dissolution. Additionally, it may accumulate substances introduced by animal or human activities.

Potential impurities found in the source water encompass various categories: **microbial contaminants** like viruses and bacteria, may originate from sewage treatment plants, septic systems, agricultural livestock operations, stormwater runoff and wildlife. **Inorganic contaminants** such as salts and metals, can either be naturally occurring or arise from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. **Pesticides and herbicides** can stem from diverse sources such as agriculture, urban stormwater runoff, and residual land applications. **Organic chemical contaminants**, including synthetic and volatile organic chemicals result from industrial processes, petroleum production, gas stations, urban stormwater runoff, and septic systems. Lastly, **radioactive contaminants** can occur naturally or arise from oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

WATER QUALITY IN THE HOME

Remove and flush faucet aerators regularly: This helps to keep debris such as pipe solder and sediment from clogging aerator screens, as well as provide the best quality water possible.

What about Home Filtration Systems? Brunswick County Public Utilities does not recommend whole house filtration systems when connected to public water systems because whole house filtration tends to remove the disinfection properties of the water and may waste a significant amount of water. The removal of disinfection chemicals in turn will allow bacteria to grow in your household plumbing. If you must use a filtration system purchase one that goes "under the counter", attaches to the kitchen faucet, or is a part of your refrigerator. This allows the disinfected water to remain in the plumbing system, preventing bacterial growth.

WAYS YOU CAN CONSERVE WATER

Brunswick County Public Utilities asks that you use water wisely.

By following the recommendations outlined below, you may be able to reduce the amount of water you use and save money on your water bill.

Irrigate during off peak hours: Peak demand for water is between 5:00 a.m. to 10:00 a.m. and 4:00 p.m. to 7:00 p.m. If irrigation is necessary, irrigate during off peak times. This will help to ensure proper water pressure for more efficient irrigating.

Reduce irrigation frequency: For established lawns, daily irrigation is not required. Irrigate every other day and only when there is no moisture in the root zone.

Irrigate on days based on your address: Brunswick County Public Utilities has established irrigation policies that affect everyone during times of drought, water shortages and emergencies. It is recommended that you set your irrigation system now to match the County's water shortage response requirements. You will more than likely save money on your water bill and lessen the chance of over-irrigating your lawn.

- If your home has an **odd** numbered address: You should irrigate on Tuesday-Thursday-Saturday
- If your home has an **even** numbered address: You should irrigate on Wednesday-Friday-Sunday
- Please, no irrigation on **Mondays**: This is a high demand day, and your irrigation system may not function properly due to low available water pressure.

When purchasing new or replacement appliances and faucets: Look for the Energy Star compliant symbol and the EPA's Water Sense symbol. These ensure the appliances are both energy and water efficient.

Exhibit C

PRESORT STD
US POSTAGE
PAID
PENSACOLA, FL
PERMIT NO. 319

IMPORTANT INFORMATION ENCLOSED

Please forward to a resident or post in a multi-tenant building

P.O. Box 17089
9255 Sturdevant Street
Pensacola, FL 32522-7089

2023 WATER QUALITY REPORT

Emerald Coast Utilities Authority

ECUA
EMERALD COAST UTILITIES AUTHORITY

We are very pleased to provide you with this year's Annual Water Quality Report and to report that our water meets all Federal and State requirements. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is, and always has been, to provide you with a safe and dependable supply of drinking water.

WHERE DOES MY WATER COME FROM?

In 2023, ECUA sourced water from 27 active wells distributed throughout its service area that pump water from the Sand-and-Gravel Aquifer. In general, ECUA customers receive water from the wells (two to five) located closest to their residence. ECUA wells are operated as separate treatment plants to allow for the adjustment of water quality parameters for maximum operational efficiencies and compliance with regulatory standards.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

The Sand-and-Gravel Aquifer is a prolific, high-quality source of water for our community. Because it does not have a confining layer above it, virtually everything that falls on the ground has the potential to affect the quality of our water supply.

ECUA is well aware of this threat to groundwater and over the years has worked with Escambia County and the city of Pensacola in strengthening their Wellhead Protection Ordinances.

There are Granular Activated Carbon (GAC) filters installed on 14 wells for iron or organic contamination removal. Basic treatment includes calcium hydroxide (lime) for pH adjustment; phosphoric acid for corrosion control in the distribution system and home plumbing; and chlorine for disinfection. Fluoride is added at select wells to help prevent tooth decay.

ECUA regularly monitors your drinking water for total coliform bacteria that are generally not harmful themselves, but are naturally present in the environment, and typically serve as an indicator that other bacteria may be present. This is a process that we take very seriously and implement carefully each month.

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring, or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

STATEMENT ABOUT CROSS CONNECTION

ECUA has been in contact with the Department of Environment Protection to correct inadequacies identified with our Cross-Connection Control (CCC) Program. A "cross-connection" is any potential or actual connection between the public water supply and a potential source of contamination or pollution. A Cross Connection Control Program is an organized, legally implemented, and structured program developed to help eliminate hazards to the municipal potable water supply. Though we are continuing to implement our adopted CCC plan to improve backflow testing rates, some backflow prevention assemblies still need testing.

2021 FDEP DRINKING WATER TREATMENT PLANT AWARD

2021 PLANT OPERATIONS EXCELLENCE AWARD

In furtherance of the Florida Department of Environmental Protection's goal of ensuring safe drinking water for all people in Florida, this certificate is hereby awarded to

Emerald Coast Utilities Authority

In recognition of outstanding operation through dedicated professionalism. Awarded at the 2022 Focus on Change webinar series event held in Fort Walton Beach, Florida.

Presented this 16th Day of March 2022

Michael Lynch, Director, Division of Water Resource Management

Each year, the FDEP presents awards to drinking water and domestic wastewater facilities around the state that demonstrate excellence in operation, maintenance, innovative treatment, waste reduction and pollution prevention, recycling, or other special achievements. These awards recognize facilities that demonstrate a special commitment to excellence in management through dedicated professionalism. ECUA is proud to be a 2021 Drinking Water Treatment Plant Award Winner in the Large Community Water System category.

BEST TASTING WATER

We are proud to report that ECUA's drinking water was selected as the Best Tasting Water 5 times between 2005 and 2023 in the annual taste-test competition sponsored by Region IX of the Florida Section of the American Water Works Association. Region IX is comprised of all water utilities in Escambia, Santa Rosa, Okaloosa and Walton Counties.

QUESTIONS

If you have any questions about this report or concerning your water utility, please contact The ECUA Water Production Regulatory Compliance Coordinator at (850) 969-6659. We encourage our valued customers to be informed about their water utility. ECUA Board and Committee meetings are held in the boardroom of the ECUA Administration Building, 9255 Sturdevant St., Pensacola, FL 32514. For a complete schedule of meetings, please contact the Executive Assistant, Ms. Amanda Miller, at (850) 969-3302, or visit us online at www.ecua.fl.gov. The ECUA Water Quality Report for 2024 will be published by July 1, 2025.

DEFINITIONS

We've provided the following definitions to help you better understand certain terms and abbreviations with which you might not be familiar.

ACTION LEVEL (AL): The concentration of a contaminant which if exceeded, triggers treatment or other requirements that a water system must follow.

LOCATIONAL RUNNING ANNUAL AVERAGE (LRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

MAXIMUM CONTAMINANT LEVEL GOAL (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MAXIMUM CONTAMINANT LEVEL (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MAXIMUM RESIDUAL DISINFECTANT LEVEL OR MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL OR MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NOT DETECTED (ND): Means not detected and indicates that the substance was not found by laboratory analysis.

PARTS PER MILLION (ppm) OR MILLIGRAMS PER LITER (mg/l): One part per million corresponds to one minute in two years or a single penny in $10,000.

PARTS PER BILLION (ppb) OR MICROGRAMS PER LITER (ug/l): One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

PICOCURIES PER LITER (pCi/L): Picocuries per liter is a measure of the radioactivity in water, a quadrillionth of a curie per liter.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC (Centers for Disease Control) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

2023 DRINKING WATER QUALITY REPORT SYSTEM-WIDE TEST RESULTS TABLE

The System-Wide Test Results table included in this report presents the results of compliance monitoring for the period of January 1 through December 31, 2023. As authorized and approved by the EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, are more than one year old.

RADIOLOGICAL CONTAMINANTS

Contaminant and unit of measurement	Sampling Dates (mo/yr)	MCL Violation	Maximum Level Detected	Range of Results	MCLG	MCL	Likely source of contamination
Alpha emitters (pCi/L)	Apr 17 - Aug 23	No	6.3	ND - 6.3	0	15	Erosion of natural deposits
Radium 226+228 (pCi/L)	Apr 17 - Nov 23	No	4.83	ND - 4.83	0	5	Erosion of natural deposits

INORGANIC CONTAMINANTS

Antimony (ppb)	May - Nov 23	No	0.08	ND - 0.08	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium (ppm)	May - Nov 23	No	0.057	0.010 - 0.057	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	May - Nov 23	No	0.25	ND - 0.25	4	4	Discharge from metal refineries and coal burning factories; discharge from electrical, aerospace and defense industries
Chromium (ppb)	May - Nov 23	No	0.96	ND - 0.96	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	May - Nov 23	No	0.99	ND - 0.99	4	4.0	Erosion of natural deposits; discharge from fertilizer & aluminum factories. Water additive which promotes strong teeth when maintained at optimum level of 0.7 ppm
Lead (point of entry) (ppb)	May - Nov 23	No	0.35	ND - 0.35	0	15	Residue from man-made pollution such as auto emissions & paint; lead pipe, casing & solder
Mercury (ppb)	May - Nov 23	No	0.097	ND - 0.097	2	2	Erosion from natural deposits; discharge from refineries & factories; runoff from landfills; runoff from cropland
Nickel (ppb)	May - Nov 23	No	1.1	ND - 1.1	n/a	100	Pollution from mining & refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	May - Nov 23	No	3.9	0.22 - 3.9	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	May - Nov 23	No	9.3	2.7 - 9.3	n/a	160	Saltwater intrusion, leaching from soil

VOLATILE ORGANIC CONTAMINANTS

Contaminant and unit of measurement	Sampling Dates (mo/yr)	MCL Violation	Maximum Level Detected	Range of Results	MCLG	MCL	Likely source of contamination
Tetrachloroethylene (ppb)	Jan - Nov 23	No	1.88 avg.	ND - 2.7	0	3	Discharge from factories and dry cleaners

STAGE 1 & 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Disinfectant or Contaminant and Unit of Measurement	Sampling Dates (mo/yr)	MCL or MRDL Violation	Level Detected (LRAA)	Range of Results	MCLG (MRDLG)	MCL or (MRDL)	Likely source of contamination
Chlorine (ppm)	Jan - Dec 23	No	0.76 avg.	0.69-0.81	4 MRDLG	4.0 MRDL	Water additive used to control microbes
Total Trihalomethanes (ppb)	Jan - Dec 23	No	0.93 avg.	ND - 2.1	n/a	80/MCL	By-products of drinking water disinfection

LEAD AND COPPER (TAP WATER)

Contaminant and unit of measurement	Sampling Dates (mo/yr)	AL Violation Y/N	90th percentile	No. of sites exceeding the AL	MCLG	AL	Likely source of contamination
Copper (tap water) (ppm)	July - Aug 23	No	0.33	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

*Well-specific data tables are available by contacting the Water Production Regulatory Compliance Coordinator at (850) 969-6659.

ECUA routinely monitors for contaminants in your drinking water according to federal and state laws, rules, and regulations, generally more frequently than the law prescribes. Except where indicated otherwise, this report is based on the results of our monitoring for the period of Jan. 1 to Dec. 31, 2023. Data obtained before Jan. 1, 2023, and presented in this report is from the most recent testing done in accordance with the laws, rules, and regulations.

ECUA has been monitoring for unregulated contaminants (UCs) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At the time of sampling, no health standards (for example, maximum contaminant levels) were established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule (UCMR), please call the Safe Drinking Water Hotline at (800) 426-4791.

UNREGULATED CONTAMINANTS

Contaminant and unit of measurement	Sampling Dates (mo/yr)	Level Detected (average) ug/L	Range of Results (ug/L)	Likely source of contamination
PFBA (perfluorobutanoic acid) (ppb)	Apr - Dec 23	0.0008	ND-0.0407	Unavailable
PFBS (perfluorobutanesulfonic acid) (ppb)	Apr - Dec 23	0.0019	ND-0.0160	Unavailable
PFHpA (perfluoroheptanoic acid) (ppb)	Apr - Dec 23	0.0020	ND-0.0378	Unavailable
4:2FTS (1H,1H,2H,2H-perfluorohexane sulfonic acid) (ppb)	Apr - Dec 23	0.0002	ND-0.0076	Unavailable
PFHxS (perfluorohexanesulfonic acid (ppb)	Apr - Dec 23	0.0047	ND-0.0553	Unavailable
PFHxA (perfluorohexanoic acid) (ppb)	Apr - Dec 23	0.0047	ND-0.1110	Unavailable
PFNA (perfluorononanoic acid) (ppb)	Apr - Dec 23	0.0006	ND-0.0162	Unavailable
6:2FTS (1H,1H,2H,2H-perfluorooctane sulfonic acid) (ppb)	Apr - Dec 23	0.0055	ND-0.2201	Unavailable
PFOS (perfluorooctanesulfonic acid) (ppb)	Apr - Dec 23	0.0060	ND-0.0357	Surfactant or emulsifier; used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps; U.S. manufacture of PFOS phased out in 2002; however, PFOS still generated incidentally
PFOA (perfluorooctanoic acid) (ppb)	Apr-Dec 23	0.0049	ND-0.0258	Used for its emulsifier and surfactant properties in or as fluoropolymers (such as Teflon), fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films
PFPeA (perfluoropentanoic acid) (ppb)	Apr-Dec 23	0.0057	ND-0.1389	Unavailable
PFPeS (Perfluoropentanesulfonic acid) (ppb)	Apr-Dec 23	0.0003	ND-0.0110	Unavailable

Additional information related to PFAS is available on our website at ecua.fl.gov/live-green/our-water-supply.

SOURCE WATER ASSESSMENT

In 2023 the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment on our water. Assessments are conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are 43 potential sources of contamination identified for this system, with a low to moderate susceptibility level. ECUA's Wellhead Protection Program helps to protect the integrity of the ECUA water system. The assessment results are available on the FDEP Source Water Assessment and Protection Program (SWAPP) website at prodapps.dep.state.fl.us/swapp/ or they can be obtained by calling the ECUA's Water Production Regulatory Compliance Coordinator at (850) 969-6659.

PRECAUTIONARY BOIL WATER NOTICES

What are Precautionary Boil Water Notices and Why Do We Issue Them? Occasionally, drinking water distribution systems experience disruptions caused by main breaks, planned maintenance, or loss of pressure, which require the issuing of a Precautionary Boil Water Notice (PBWN).

The PBWN does not mean that contamination is present but is merely a precautionary measure until bacteriological test results confirm that no contamination exists.

ECUA makes every effort possible to keep our customers informed as to the quality of our water. The status of all PBWNs can be obtained any time of day by calling the ECUA SCADA office at (850) 969-3343 or online at www.ecua.fl.gov. Customers may also opt-in to the ECUA Notification System by going through the registration process through a link located on the homepage of the ECUA website.

2023 TABLE OF SYSTEM-WIDE AVERAGES

REGULATED VOC'S	REGULATORY MCL	AVERAGED CONCENTRATION
Tetrachloroethylene (ppb)	3	0.076
INORGANIC CONTAMINANTS	**REGULATORY MCL**	**AVERAGED CONCENTRATION**
Antimony (ppb)	6	0.0002
Barium (ppm)	2	0.025
Beryllium (ppb)	4	0.017
Chromium (ppb)	100	0.275
Fluoride (ppm)	4	0.515
Lead (ppb)	15	0.010
Mercury (ppb)	2	0.012
Nickel (ppb)	100	0.276
Nitrate (as Nitrogen) (ppm)	10	1.535
Sodium (ppm)	160	4.794

LEAD AND COPPER

ECUA is participating in the EPA's national initiative to 'Get the Lead Out' and has begun conducting a material inventory of all service lines connected to our drinking water distribution system to determine if any of these pipes contain lead. The Lead and Copper samples collected and analyzed in 2023 indicate that the ECUA Water System is in full compliance with the Lead and Copper Rule.

If present, elevated levels of Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Emerald Coast Utilities Authority is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for Lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about Lead in your water, you may wish to have your water tested.

Information on Lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at epa.gov/safewater/lead.

Exhibit D

Ridgewood Water

Over 100 Years of Service

2023 Annual *Drinking Water* *Quality* Report

Ridgewood Water - PWSID NJ0251001
Results from the Year 2022

New and Improved Website:
water.ridgewoodnj.net
@ridgewoodwater

Introduction

We are pleased to present to you this year's Annual Drinking Water Quality Report, which is designed to inform you about the quality of the water supplied to your premises. Our goal is to provide you with a safe, continuous, and dependable supply of drinking water. We are committed to ensuring the quality of your water and routinely monitor and test the water for a host of parameters. The results of some of this monitoring and testing are presented in this report as required by the New Jersey Department of Environmental Protection (NJDEP). Some of the language in this report is prescribed by the NJDEP and much of the information is rather technical. If you have any questions about this report or Ridgewood Water (RW), please contact us at 201-670-5520.

Customer Participation

We want our customers to be informed. Therefore, we strongly recommend attending regularly scheduled Village Council public meetings at 111 North Maple Avenue. Meetings are held on the second Wednesday of each month at 8:00 p.m. Public meeting agendas, minutes and videos can be viewed on the Village of Ridgewood website. Ridgewood Water plans to host an Open House or Webinar in the Fall; please look out for updates on this in September.

Where Does My Water Come From?

Ridgewood Water's source is primarily groundwater from wells. We own and operate fifty-two deep wells which are located throughout the service area in the Borough of Glen Rock, the Borough of Midland Park, the Township of Wyckoff, and the Village of Ridgewood. We also purchase water from the Passaic Valley Water Commission and Veolia Water.

Quick Fact:
*One of Ridgewood Water's employees is 4th generation with a combined family experience of over **135 years!***

Tap or Bottled Water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- *Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.*
- *Inorganic contaminants such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas projection, mining, or farming.*
- *Pesticides and herbicides which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.*
- *Organic chemical contaminants including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff, and septic systems.*
- *Radioactive contaminants which can be naturally occurring or be the result of oil and gas production and mining activities.*

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide similar protection for public health. EPA/NJDEP regulations are more stringent than FDA regulations.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

Ground Water Under The Direct Influence of Surface Water (GWUDI)

Ridgewood Water is presently further testing 1 well under GWUDI guidelines. The results of the initial study found no evidence of surface water influence at the well and all further testing indicates the same results. Finalized results will be outlined in next year's Drinking Water Quality Report.

Nitrate and Your Drinking Water

Nitrate in drinking water at levels above 10 PPM is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your healthcare provider.

Sodium and Your Drinking Water

Ridgewood Water, the Veolia Water, and Passaic Valley Water Commission exceeded the recommended Upper Limit

(RUL) for Sodium. For healthy individuals the sodium intake from water is not very significant because a much greater intake of sodium is from salt in the diet. However, Sodium levels above the RUL may be of concern to individuals on a sodium restricted diet.

PFAS and Your Drinking Water

As you have read in our quarterly notifications to you over the past year, Ridgewood Water has exceeded the MCL for PFOA at 23 of our drinking water treatment facilities and we have exceeded the MCL for PFOS at 4 of our drinking water facilities. We have been working diligently to resolve this issue by installing new treatment on all our wells, with an estimated completion date of 2026. In the meantime, we are doing everything we can to minimize the level of PFAS in your water by favoring wells with the lowest levels of PFAS and purchasing water from sources that meet the PFAS standards. According to the New Jersey Department of Health (NJDOH), some people who drink water containing PFOA or PFOS in excess of the MCL over many years could experience health issues with their kidney, liver, reproductive or immune, and endocrine systems and it can also increase the risk of testicular or kidney cancer in men. For women, drinking water containing PFOA in excess of the MCL over many years may cause developmental delays in a fetus and/or an infant. Some of these developmental effects can persist through childhood. For more information on the health effects of PFAS, please refer to NJDOH documentation at *www.nj.gov/health/ceohs/documents/pfas_drinking%20water.pdf*.

Special Notes

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These individuals should seek advice from their healthcare providers about drinking this water.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Refer to the Ridgewood Water website for additional Water Quality Information and PFAS Resources.

Ridgewood Water - Source Water Assessment

The NJDEP has completed and issued Source Water Assessment Reports and Summaries for Ridgewood Water, Veolia Water, and Passaic Valley Water Commission, which are available at *www.state.nj.us/dep/swap* or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact Ridgewood Water to obtain information regarding these Source Water Assessments. Ridgewood Water's source water susceptibility ratings are shown below and a list of potential contaminant sources are listed on page 7.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursors		
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
52	1	47	4	28	24	0	0	21	31	49	0	3	31	21	0	26	26	0	52	0	0	0	0	52

Ridgewood Water

NJ0251001 – REGULATED SUBSTANCES

Directly related to the safety of drinking water.

LEAD AND COPPER - TESTED AT CUSTOMER'S TAP. TESTING IS DONE ANNUALLY						
Contaminant	NJDEP Action Level	Ideal Goal (NJDEP MCLG)	90% of Tests	# of Tests > NJDEP Action Level	Violation	Typical Sources
Lead	90% of homes less than 15 PPB	0 PPB	3.49 PPB	0 out of 31	NO	Corrosion of household plumbing
Copper	90% of homes less than 1.3 PPM	1.3 PPM	0.246 PPM	0 out of 31	NO	Corrosion of household plumbing
INORGANIC COMPOUNDS						
Contaminant	Highest Level Allowed	Ideal Goal	Highest Result	Range of Test Results	Violation	Typical Sources
Arsenic	5 PPB	N/A	2.96 PPB	ND - 2.96 PPB	NO	Erosion of natural deposits
Barium	2 PPM	2 PPM	0.575 PPM	ND - 0.575 PPM	NO	Discharge from steel or pulp mills
Chromium	100 PPB	100 PPB	3.32 PPB	ND - 3.32 PPB	NO	Erosion of natural deposits
Nickel	N/A	N/A	0.0069 PPM	ND - 0.0069 PPM	NO	Runoff from fertilizer use
Nitrate	10 PPM	10 PPM	9.2 PPM	2.0 - 9.2 PPM	NO	Runoff from fertilizer use
Nitrite	1 PPM	1 PPM	0.4 PPM	ND - 0.4 PPM	NO	Runoff from fertilizer use
VOLATILE ORGANIC COMPOUNDS						
Contaminant	Highest Level Allowed (NJDEP MCL)	Ideal Goal (NJDEP MCLG)	Highest Result	Range of Test Results	Violation	Typical Sources
Tetrachloroethylene	1 PPB	0 PPB	0.2 PPB	ND - 0.2 PPB	NO	Discharge from factories and dry cleaners
RADIONUCLIDES (2017 DATA)						
Contaminant	Highest Level Allowed (NJDEP MCL)	Ideal Goal (NJDEP MCLG)	Highest Result	Range of Test Results	Violation	Typical Sources
NJ Gross Alpha	15 PCI/L	0 PCI/L	8.64 PCI/L	0.040 PCI/L - 8.64	NO	Erosion of natural deposits
Radium -226	Combined 5 PCI/L	0 PCI/L	0.983 PCI/L	ND - 0.983 PCI/L	NO	Erosion of natural deposits
Radium -228	Combined 5 PCI/L	0 PCI/L	0.99 PCI/L	ND - 0.990 PCI/L	NO	Erosion of natural deposits
Uranium	30 PPB	0 PPB	2.71 PPB	0.443 PPB - 2.71 PPB	NO	Erosion of natural deposits
DISINFECTION BYPRODUCTS						
Contaminant	Highest Level Allowed (NJDEP MCL)	Ideal Goal (NJDEP MCLG)	Highest LRAA	Range of Test Results	Violation	Typical Sources
Total Trihalomethanes*	80 PPB	NA	36.43 PPB	9.68 - 36.43 PPB	NO	By-product of drinking water disinfection
Total Halocetic Acids*	60 PPB	NA	15.77 PPB	3.14 - 15.77 PPB	NO	By-product of drinking water disinfection
REGULATED DISINFECTANTS						
Substance	MRDL	MRDLG	Minimum	Maximum	Violation	Typical Sources
Chlorine	4.0 PPM	4.0 PPM	1.33 PPM	1.70 PPM	NO	Water additive to control microbes
SECONDARY SUBSTANCES - RELATED TO THE AESTHETIC QUALITY OF DRINKING WATER						
Substance	Year Sampled	Ideal Goal (MCLG)	Range of Test Results	RUL Exceeded		Typical Source
ABS/LAS	2022	NA	ND	N		Surfactants from detergents and cleansers
Chloride	2022	NA	71.9 - 300 PPM	N		Naturally occurring element
Hardness (as CaCO3)	2022	NA	223 - 486 PPM	Y		Naturally occurring element
Manganese	2022	NA	ND - 0.0338 PPM	N		Naturally occurring element, leaching from metal pipes
pH	2022	NA	6.68 - 8.86 PPM	N		Natural property of water
Sodium	2022	NA	25.8 - 136 PPM	N		Naturally occurring element, road salt
Sulfate	2022	NA	ND - 77.9 PPM	N		Naturally occurring element
Total Dissolved Solids	2022	NA	356 - 903 PPM	Y		Minerals and salts dissolved in the water
Zinc	2022	NA	ND - 0.433 PPM	N		Naturally occurring element
PERFLUORINATED COMPOUNDS						
Contaminant		Highest Level Allowed	Highest RAA	Range of Test Results	Violation	Typical Source
PFOA - Perfluorooctanoic Acid		14 PPT	34.8 PPT	ND - 34.8 PPT	YES	Used in manufacturer of fluoropolymers, firefighting foams, cleaners, cosmetics, greases, lubricants, paints, polishes, adhesives and photographic films
PFOS - Perfluorooctanesulfonic Acid		13 PPT	16.6 PPT	ND - 16.6 PPT	YES	Used in firefighting foam, circuit board etching, cleaners, floor polish, and pesticides
PFNA - Perfluorononanoic acid		13 PPT	2.32 PPT	ND - 2.32 PPT	NO	Man-made chemical; used in products to make them stain, heat, grease, and water resistant
PFHxS - Perfluorohexanesulfonic acid		NA	10.9 PPT	ND - 10.9 PPT	NO	Man-made chemical; used in products to make them stain, heat, grease, and water resistant
PFHpA - Perfluoroheptanoic acid		NA	6.31 PPT	ND - 6.31 PPT	NO	Man-made chemical; used in products to make them stain, heat, grease, and water resistant
PFBS - Perfluorobutanesulfonic acid		NA	4.53 PPT	ND - 4.53 PPT	NO	Man-made chemical; used in products to make them stain, heat, grease, and water resistant
PFHxA - Perfluorohexanoic acid		NA	7.62 PPT	ND - 7.62 PPT	NO	Man-made chemical; used in products to make them stain, heat, grease, and water resistant
PFDA - Perfluorodecanoic acid		NA	ND	ND	NO	Man-made chemical; used in products to make them stain, heat, grease, and water resistant
EPA UCMR4 MONITORING						
Contaminant	Year	Level Detected	Units of Measurement	Typical Source		
Manganese	2018-2019	Range = 0.403 - 26.1	PPB	Naturally occurring element		
Bromochloroacetic Acid	2018-2019	Range = 1.04 - 2.21	PPB	By-product of drinking water disinfection		
Bromodichloroacetic Acid	2018-2019	Range = ND - 0.990	PPB	By-product of drinking water disinfection		
Chlorodibromoacetic Acid	2018-2019	Range = ND - 0.938	PPB	By-product of drinking water disinfection		
Dibromoacetic Acid	2018-2019	Range = 2.21 - 3.81	PPB	By-product of drinking water disinfection		
Dichloroacetic Acid	2018-2019	Range = 0.476 - 1.19	PPB	By-product of drinking water disinfection		
Monobromoacetic Acid	2018-2019	Range = ND - 0.537	PPB	By-product of drinking water disinfection		

Refer to page 7 for abbreviations and definitions.

VEOLIA WATER - PWSID NJ0220001/NJ02380001

LEAD AND COPPER - Tested at customer's tap. Tested is done annually

			Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001	Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001	Veolia Franklin Lakes NJ0220001	Veolia Hacken-sack NJ0238001	
Contaminant	**NJDEP Action Level**	**Ideal Goal**	**90% of Tests**		**# of Sites > Action Level**		**Violation**	**Violation**	**Typical Sources**
Lead	90% of homes less than 15 PPB	0	2.77 PPB	5.55 PPB	0	2	NO	NO	Lead service lines, corrosion of household plumbing including fittings and fixtures; erosion of natural deposits
Copper	90% of homes less than 1.3 PPM	1.3 PPM	0.204 PPM	0.06 PPM	0	0	NO	NO	Corrosion of household plumbing systems; erosion of natural deposits.

INORGANIC COMPOUNDS

			Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001		
Contaminant	**Highest Level Allowed**	**Ideal Goal**	**Range of Test Results**		**Violation**	**Typical Sources**
Arsenic	5 PPB	N/A	0.503-0.503 PPB	ND-ND	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2 PPM	2 PPM	0.0303-0.0303 PPM	0.075-0.0754 PPM	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	100 PPB	100 PPB	6.570-6.570 PPB	0.563-0.563 PPB	NO	Discharge from steel and pulp mills; erosion of natural deposits
Nickel	N/A	N/A	0.004-0.004 PPM	0.001-0.001 PPM	NO	Erosion of natural deposits
Nitrate as N	10 PPM	10 PPM	2.46-2.46 PPM	ND-0.68	NO	Runoff from fertilizer usage; leaching from septic tanks, sewage; erosion of natural deposits

DISINFECTION BYPRODUCTS

			Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001	Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001	Veolia Franklin Lakes NJ0220001	Veolia Hacken-sack NJ0238001	
Contaminant	**Highest Level Allowed**	**Ideal Goal**	**Highest LRAA**		**Range of Test Results**		**Violation**	**Violation**	**Typical Sources**
Total Trihalomethanes	80 PPB	NA	38.0 PPB	39.1 PPB	17.4 - 50.8 PPB	10.9 - 62.6 PPB	NO	NO	By-product of drinking water disinfection
Total Halocetic Acids	60 PPB	NA	12.1 PPB	26.6 PPB	4.05 - 14.1 PPB	2.5 - 65.9 PPB	NO	NO	By-product of drinking water disinfection

REGULATED DISINFECTANTS

			Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001	Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001			
Contaminant	**MRDL**	**MRDLG**	**Range of Test Results**		**Max LRAA**		**Violation**	**Typical Source**	
Chloramines as CL2	4.0 PPM	4.0 PPM	0 - 2.83 PPM	0 - 3.98 PPM	1.09 PPM	2.30 PPM	NO	Water additive to control microbes	

PERFLUORINATED COMPOUNDS

		Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001	Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001	Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001	
Contaminant	**Highest Level Allowed**	**RAA**	**Range of Test Results**	**Violation**	**Violation**	**Violation**	**Violation**	**Typical Sources**
PFOA Perfluorooctanoic Acid	14 PPT	14.9 PPT	10.5 PPT	11.0 - 18.7 PPT	7 - 14 PPT	YES	NO	Used in manufacturer of fluoropolymers, firefighting foams, cleaners, cosmetics, greases, lubricants, paints, polishes, adhesives and photographic films
PFOS Perfluorooctanesulfonic Acid	13 PPT	7.3 PPT	3.2 PPT	5.7 - 9.3 PPT	ND - 4 PPT	NO	NO	Used in firefighting foam, circuit board etching, cleaners, floor polish, and pesticides
PFHxS Perfluorohexanesulfonic Acid	NA	N/A	N/A	ND - 2 PPT	ND - 3 PPT	NO	NO	Man-made chemical; used in products to make them stain, heat, grease, and water resistant.
PFHpA Perfluoroheptanoic Acid	NA	N/A	N/A	2.4 - 3.6 PPT	2 - 5 PPT	NO	NO	Man-made chemical; used in products to make them stain, heat, grease, and water resistant.
PFBS Perfluorobutanesulfonic Acid	N/A	N/A	N/A	N/A	ND - 3 PPT	NO	NO	Man-made chemical; used in products to make them stain, heat, grease, and water resistant.

SECONDARY SUBSTANCES - RELATED TO THE AESTHETIC QUALITY OF DRINKING WATER

			Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001	Veolia Franklin Lakes NJ0220001	Veolia Hackensack NJ0238001	
Substance	**Year Sampled**	**Ideal Goal (MCLG)**	**Range of Test Results**		**RUL Exceeded**		Typical Sources
Chloride	2021	NA	94 - 119 PPM	73 - 216 PPM	N	N	Naturally occurring element
Hardness (as CaCO3)	2021	NA	246 - 283 PPM	75 - 154 PPM	Y	N	Naturally occurring element
pH	2021	NA	7.27 - 7.87	7.54 - 8.22	N	N	Natural property of water
Sodium	2021	NA	55 - 61 PPM	44 - 121 PPM	Y	Y	Naturally occurring element, road salt
Sulfate	2021	NA	21 - 21 PPM	14 - 14 PPM	N	N	Naturally occurring element
Total Dissolved Solids	2021	NA	411 - 452 PPM	223 - 507 PPM	Y	Y	Minerals and salts dissolved in the water

Source Water Assessment:

NJDEP has prepared Source Water Assessment reports and summaries for all public water systems. The Source Water Assessment for the PVWC system (PWS ID 1605002) and the North Jersey District Water Supply Commission (NJDWSC) (PWS ID 1613001) can be found online at the NJDEP's source water assessment website- *http://www.nj.gov/dep/watersupply/swap/index.html* or by contacting NJDEP's Bureau of Safe Drinking Water at 609-292-5550 or *watersupply@dep.nj.gov*.

If a system is rated highly susceptible for a contamination category, it does not mean a customer is – or will be – consuming contaminated water. The rating reflects the potential for contamination of a source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any of those contaminants are detected at frequencies and concentrations above allowable levels. The source water assessments performed on the intakes for each system list the following susceptibility ratings for a variety of contaminants that may be present in source waters:

2022 Water Quality Results - Table of Detected Contaminants

Regulated Contaminant (units)	Goal (MCLG	Highest Level Allowed (MCL)	PVWC Little Falls-WTP PWSID NJ1605002	NJDWSC Wanaque-WTP PWSID NJ1613001	Source of Substance	Violation?
Treated Drinking Water at the Treatment Plant						
Turbidity (NTU) Turbidity is a measure of the cloudiness of the water and is monitored as an indicator of water quality. High turbidity can limit the effectiveness of disinfectants.	NA	Treatment Technique (TT) = 1 NTU	Highest Level Detected and Range (Low-High)		Soil Run-Off	NO
			0.13 (0.02 -0.13)	0.4 (0.03-0.4)		
	NA	TT= % of samples <0.3 NTU (min 95%)	Lowest Monthly Percentage of Samples Meeting Turbidity Limits			
			100%	99.98%		
Total Organic Carbon (%)	NA	TT= % removal or Removal Ratio	% Removal	Removal Ratio	Naturally present in the environment.	NO
			46.7-72.6 (25 - 45 required)	(0.9-1.4)		
Barium (PPM)	2	2	0.016-0.027	0.00654	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.	NO
Fluoride (PPM)	4	4	<0.05-0.05	ND	Erosion of natural deposits.	NO
Nickel (PPB)	N/A	N/A	2.01-2.76	ND	Erosion of natural deposits.	NO
Nitrate (PPM)	10	10	1.45 (0.71-2.76)	ND	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.	NO
Radium (PCI/L)	0	5	ND (2014 Data)	ND (2014 Data)	Erosion of Natural Deposits	NO
Perfluorooctanesulfonic acid [PFOS] (PPT)	0	13*	5.37 highest running annual average (3.8-9.2)	3.63**	Metal plating and finishing, discharge from industrial facilities, aqueous film-forming (firefighting) foam	NO
Perfluorooctanoic acid [PFOA] (PPT)	0	14*	8.38 highest running annual average (5.7-12.8)	4.38**	Metal plating and finishing, discharge from industrial facilities, aqueous film-forming (firefighting) foam	NO

*MCL created by the state of New Jersey. Currently there is no Federal MCL for perfluorinated compounds

** These values taken from NJ Drinking Water Watch

2022 Water Quality Results - Table of Detected Secondary Parameters

Contaminant	NJ Recommended Upper Limit (RUL)	PVWC Little Falls-WTP PWSID NJ1605002		NJDWSC Wanaque-WTP PWSID NJ1613001	
		Range of Results	RUL Achieved?	Result	RUL Achieved?
Treated Drinking Water at the Entry Point to the Distribution System					
Alkylbenzene Sulfonate [ABS]/Linear Alkylbenzene Sulfonate [LAS] (PPB)	500	110-220	YES	<50	YES
Alkalinity (PPM)	NA	48-82.5	NA	35.0	NA
Aluminum (PPB)	200	17.4-29.3	YES	26.4	YES
Chloride (PPM)	250	101.8-158.2	YES	42.8	YES
Color (color units)	10	<5	YES	5.0	YES
Copper (PPM)	<1	0.00087-0.00742	YES	0.0141	YES
Hardness, CaCO3 (PPM)	250	90-168	YES	49.0	YES
Iron (PPB)	300	<100	YES	<200	YES
Manganese (PPB)*	50	9.2-18.8	YES	3.39	YES
Odor (Threshold Odor Number)	3	6-80	NO	<1	YES
pH	6.5 to 8.5	7.77-8.24	YES	8.05	YES
Sodium (PPM)	50	62.8-135.6	NO**	28.6	YES
Sulfate (PPM)	250	37.8-89.3	YES	5.96	YES
Total Dissolved Solids (PPM)	500	262.5-487.5	YES	126	YES
Zinc (PPB)	5000	2.7-26	YES	<10	YES

Abbreviations And Definitions

AL: *Action Level – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.*

DISINFECTION BYPRODUCT PRECURSORS: *A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens reacts with dissolved organic material (for example leaves) present in surface water.*

**For Total Halocetic Acids (HAA5s) and Total Trihalomethanes (TTHMs), which are disinfection byproducts, compliance is based on a Locational Running Annual Average (LRAA), calculated at each monitoring location. The LRAA calculation is based on four completed quarters of monitoring results.*

INORGANICS: *Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.*

L, M, H: *Low, Medium, High Susceptibility*

MCL: *Maximum Contaminant Level – the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.*

MCLG: *Maximum Contaminant Level Goal – the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.*

MRDL: *Maximum Residual Disinfectant Level – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.*

MRDLG: *Maximum Residual Disinfectant Level Goal – The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs Do not reflect the benefits of the use of disinfectants to control microbial contamination.*

NA: *Not Applicable.*

ND: *Non-Detectable – the concentration of the constituent (if present at all) is below the minimum detectable level of the laboratory.*

NTU: *Nephelometric Turbidity Unit – a measure of the clarity of the water (as opposed to its cloudiness). 5 NTU is just noticeable to the average person.*

NUTRIENTS: *Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.*

PATHOGENS: *Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal waste.*

PCI/L: *Picocuries per liter - a measure of the radioactivity in water.*

PESTICIDES: *Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.*

PPB: *Parts per billion (equivalent to micrograms per liter, µg/L) – a representation of the concentration of the constituent. One PPB corresponds to one minute in 2,000 years, or a single penny in $10,000,000.*

PPM: *Parts per million (equivalent to milligrams per liter, mg/L) – a representation of the concentration of the constituent. One PPM corresponds to one minute in 2 years or a single penny in $10,000.*

PPT: *Parts per trillion (equivalent to one nanogram per liter ng/L) – a representation of the concentration of the constituent. One PPT is roughly equivalent to one second per thirty two years*

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Ridgewood Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in interior plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking and cooking. If you are concerned about lead in your water, Lead Testing Kits are available at Ridgewood Water's main office with a nominal fee to be provided to the testing lab. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at www.epa.gov/safewater/lead.

RADIONUCLIDES: *Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.*

RADON: *Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to www.nj.gov/dep/rpp/radon/index.htm or call (800) 648-0394.*

RMCL(G): *Recommended Maximum Contaminant Level of a contaminant that is allowed in drinking water (Goal).*

RUL: *Recommended Upper Limit – Recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as odor, taste or appearance. RUL's are recommendations, not mandates.*

SAFE DRINKING WATER ACT: *The Federal law, administered by the NJDEP which defines and requires drinking water quality.*

SECONDARY CONTAMINANT: *Substances that do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.*

TT: *Treatment Technique – a required process intended to reduce the level of a contaminant in drinking water.*

VOLATILE ORGANIC COMPOUNDS: *Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.*

New resource Jersey Water Check connects you to learn more about New Jersey's water.

Curious about drinking water and wastewater services in our state? Want to know more than water quality? Explore Jersey WaterCheck, a new online accessible resource by Jersey Water Works that helps you understand New Jersey's water systems. Look us up on this new dashboard.

Jersey WaterCheck url:
https://www.njwatercheck.com/

Please share this information with other people who drink this water, especially those who may not have received this notice (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place, distributing copies by hand or mail, or by visiting our website.

LANDSCAPE INDUSTRY

Improving Irrigation Efficiency

9 billion

gallons of water per day is used for residential outdoor water use.

25,000

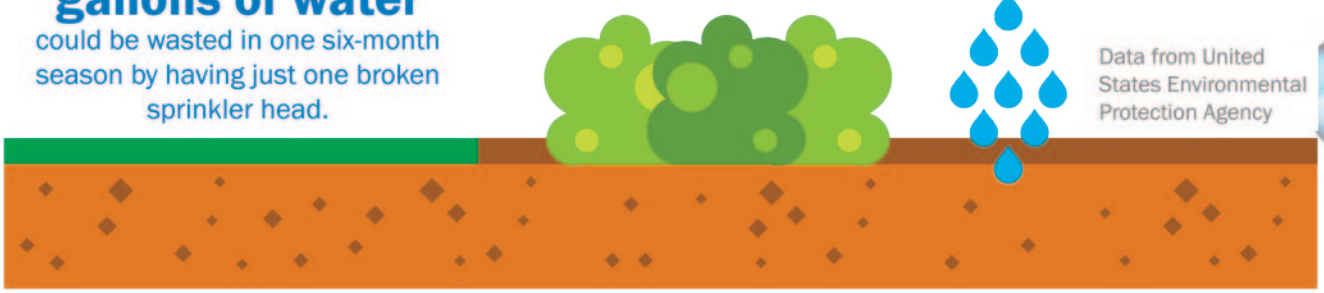
gallons of water

could be wasted in one six-month season by having just one broken sprinkler head.

As much as

50%

of the water we use outdoors is wasted due to inefficient watering methods and systems.



Data from United States Environmental Protection Agency

Slow the Flow

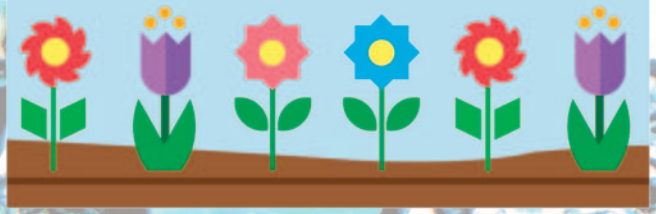
If water is applied too quickly, it can cause the water to run off of the landscape and into the street.

Check Sprinkler Heads

Ensure that sprinkler heads are properly placed and set-up so they aren't irrigating the sidewalk.

Use Low Volume Irrigation

Use drip irrigation, micro-sprinklers, or bubbler irrigation for planting beds and narrow strips of vegetation.



Install a Rain Sensor

A rain sensor detects rain and shuts off an irrigation system.

JULY SMART IRRIGATION MONTH

Smart Irrigation Month is an Irrigation Association initiative to increase awareness of the value of water use ... and grow demand for water-saving products, practices and services.

For more great resources, visit: www.smartirrigationmonth.com

Exhibit E


Ridgewood
Water

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Ridgewood Water Has Levels of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) Above a Drinking Water Standard

Ridgewood Water Did Not Bring Our Water into Compliance with PFOA and PFOS Drinking Water Standards Within One Year; However, Ridgewood Water is Taking Action to Implement System-Wide Treatment

As our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation. For more information, please contact Customer Service at (201) 670-5520 or cswater@ridgewoodnj.net.

You were previously notified that our water system is in violation of the New Jersey drinking water PFOA and PFOS standards or maximum contaminant levels (MCLs) at the points of entry listed on page six of this public notice. The most recent public notice and update regarding this matter are also available at https://water.ridgewoodnj.net/pfas-resources/. We will continue to provide you with an updated public notice every 3 months until we complete all approved remedial measures and return to compliance with the PFOA and PFOS MCLs.

As of the 1st quarter 2024 sampling period, ending on March 31st, 2024, we have exceeded the MCL for PFOA at twenty-two (22) points of entry and the MCL for PFOS at four (4) points of entry. Our water system is required to take any action necessary to bring the water system into compliance with the applicable MCL within one-year from the initial violation. Our water system did not remediate the PFOA and PFOS MCL violations at twenty (22) points by the one-year deadline.

New Jersey adopted a standard, or MCL, for PFOA in 2020 and monitoring began in 2021. The MCL for PFOA is 14 parts per trillion (ppt) and is based on a running annual average (RAA), in which the four most recent quarters of monitoring data are averaged. The RAA for PFOA, based on samples collected over the last four quarters at the exceeding treatment facilities, are between 17 – 31 ppt. A full list of the system's treatment facility exceedances and their RAA can be found on page six of this notice.

New Jersey adopted a standard, or MCL, for PFOS in 2020 and monitoring began in 2021. The MCL for PFOS is 13 parts per trillion (ppt) and is based on a RAA, in which the four most recent quarters of monitoring data are averaged. The RAA for PFOS, based on samples collected over the last four quarters at the exceeding treatment facilities, are between 14 – 17 ppt. A full list of the system's treatment facility exceedances and their RAA can be found on page six of this notice.

What is being done?

Ridgewood Water has been working closely with New Jersey's Department of Environmental Protection (NJDEP) on this issue since 2020. In May 2023, Ridgewood Water entered into an Administrative Consent Order (ACO), continuing to acknowledge the need for comprehensive treatment, **setting a goal to have all treatment facilities online by the end of 2026**. Our PFAS Treatment Master Plan for designing, purchasing, integrating, and testing a permanent PFAS treatment system was completed in 2020, and approved by the Village of Ridgewood Council in February 2021. NJDEP reviewed Ridgewood Water's PFAS Treatment Master Plan in November 2021. As part of the Master Plan, Ridgewood Water is centralizing PFAS treatment

by consolidating from thirty-one (31) treatment facilities to twelve (12) treatment facilities to provide the most efficient treatment.

Implementation of that Master Plan is well underway.

- Carr PFAS Treatment Facility, Ridgewood Water's first installation, went active in 2019.
- Twinney PFAS Treatment Facility, the second installation, went online in 2022.
- In 2022, an interconnection with Passaic Valley Water Commission was completed.
- In 2023, construction began at the Prospect and Ravine PFAS Treatment Facilities.
- In 2024, construction begins on the Ames PFAS Treatment Facility and the Raw Water Mains to connect satellite wells to Ames, Cedar Hill, Prospect and Wortendyke.
- In 2024, design, permitting, and construction of additional treatment facilities will continue.

Additionally, Ridgewood Water purchases water from Veolia and Passaic Valley Water Commission for additional water supply, which is compliant with NJDEP PFAS regulations.

Integrating PFAS treatment systems into Ridgewood Water's existing treatment facilities to address the contamination is complex, time-consuming, expensive – and necessary. Ridgewood Water is dedicated to providing treatment for this contamination, which was caused by others, and is in court to hold those companies who are responsible for the contamination accountable, so that they, not you, pay the costs of getting the job done.

Ridgewood Water has created a PFAS Information page on its website at https://water.ridgewoodnj.net/pfas-resources/.

If you have additional questions, please contact Customer Service at cswater@ridgewoodnj.net or (201) 670-5520.

What are PFAS?

Per- and polyfluoroalkyl substances ("PFAS") are a group of man-made chemicals that includes PFOA, PFOS, PFNA, GenX, and many others. PFAS have been manufactured and used in a variety of industries in the United States, and around the globe, since the 1940s. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body—meaning they don't break down and they can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects. The two prominent PFAS compounds found in the Ridgewood Water groundwater sources are PFOA and PFOS.

What is PFOA?

Perfluorooctanoic acid (PFOA) is a member of the group of chemicals called per- and polyfluoroalkyl substances (PFAS), used as a processing aid in the manufacture of fluoropolymers used in non-stick cookware and other products, as well as other commercial and industrial uses, based on its resistance to harsh chemicals and high temperatures. PFOA has also been used in aqueous film-forming foams for firefighting and training, and it is found in consumer products such as stain-resistant coatings for upholstery and carpets, water-resistant outdoor clothing, and greaseproof food packaging. Major sources of PFOA in drinking water include discharge from industrial facilities where it was made or used and the release of aqueous film-forming foam. Although the use of PFOA has decreased substantially,

contamination is expected to continue indefinitely because it is extremely persistent in the environment and is soluble and mobile in water.

What is PFOS?

Perfluorooctanesulfonic acid (PFOS) is a member of the group of chemicals called per- and polyfluoroalkyl substances (PFAS), that are man-made and used in industrial and commercial applications. PFOS is used in metal plating and finishing as well as in various commercial products. PFOS has also been used in aqueous film-forming foams for firefighting and training, and it is found in consumer products such as stain-resistant coatings for upholstery and carpets, water-resistant outdoor clothing, and greaseproof food packaging. Major sources of PFOS in drinking water include discharge from industrial facilities where it was made or used, and the release of aqueous film-forming foam. Although the use of PFOS has decreased substantially, contamination is expected to continue indefinitely because it is extremely persistent in the environment and is soluble and mobile in water.

What does this mean?

**FOR PFOA: ***_People who drink water containing PFOA in excess of the MCL over time could experience problems with their blood serum cholesterol levels, liver, kidney, immune system, or, in males, the reproductive system. Drinking water containing PFOA in excess of the MCL over time may also increase the risk of testicular and kidney cancer. For females, drinking water containing PFOA in excess of the MCL over time may cause developmental delays in a fetus and/or an infant. Some of these developmental effects may persist through childhood._

FOR PFOS: _*People who drink water containing PFOS in excess of the MCL over time could experience problems with their immune system, kidney, liver, or endocrine system. For females, drinking water containing PFOS in excess of the MCL over time may cause developmental effects and problems with the immune system, liver, or endocrine system in a fetus and/or an infant. Some of these developmental effects may persist through childhood._

* For specific health information see
https://www.nj.gov/health/ceohs/documents/pfas_drinking%20water.pdf and
https://www.nj.gov/dep/pfas/index.html.

What should I do?

- If you have specific health concerns, a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at higher risk than other individuals and should seek advice from your health care providers about drinking this water.
- The New Jersey Department of Health advises that infant formula and other beverages for infants, such as juice, should be prepared with bottled water when PFOA and/or PFOS is elevated in drinking water.
- Pregnant, nursing, and women considering having children may choose to use bottled water for drinking and cooking to reduce exposure to PFOA and/or PFOS.
- Other people may also choose to use bottled water for drinking and cooking to reduce exposure to PFOA and/or PFOS or a home water filter that is certified to reduce levels of PFOA and/or PFOS. Home water treatment devices are available that can reduce levels of PFOA and/or PFOS. For more specific information regarding the effectiveness of home water filters for reducing PFOA and/or PFOS, visit the National Sanitation Foundation (NSF) International website, http://www.nsf.org/.
- Boiling your water will not remove PFOA or PFOS.

For more information, see https://www.nj.gov/dep/watersupply/pfas/.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.
Ridgewood Water has thirty-one (31) total treatment facilities in its service area. During the first quarter of 2024, fourteen (14) of the twenty-five (25) active treatment facilities were running, and six (6) were permanently offline for repairs and/or replacement. Of the fourteen (14) facilities running, twelve (12) facilities had exceedances, and two (2) facilities have treatment in place and thus do not exceed the NJ PFAS standards. Given fluctuations in seasonal demand between off-peak (winter) and peak (summer) water usage, some treatment facilities are made active or inactive based on the hydraulic needs of the service area. **Please conserve water. When you conserve, we are able to deliver water with lower levels of PFAS.**

Treatment Facilities Exceeding the PFOA MCL

The MCL for PFOA is 14 parts per trillion (ppt) and is based on a running annual average (RAA), in which the four most recent quarters of monitoring data are averaged.

Point of Entry (Treatment Facilities)	RAA 1Q2024 (ppt)	Treatment Facilities Running 1Q2024	POE exceeded 1 year deadline
TP004012	**18**	**X**	**X**
TP005023	**24**	**X**	**X**
TP010030	**22**	**X**	**X**
TP014038	**17**	**X**	**X**
TP019049	**18**	**X**	**X**
TP020051	**19**		**X**
TP025062	**21**	**X**	**X**
TP028068	**27**	**X**	**X**
TP002003	**26**		**X**
TP044099	**18**	**X**	**X**
TP001001	**31**		**X**
TP018047	**23**	**X**	**X**
TP024060	**27**		**X**
TP030072	**26**		**X**
TP032076	**21**	**X**	**X**
TP033079	**25**		**X**
TP035083	**23**		**X**
TP023057	**26**		**X**
TP043097	**24**		**X**
TP021053	**25**	**X**	**X**
TP016042	**17**		**X**
TP022055	**27**	**X**	**X**

Treatment Facilities Not Exceeding PFOA or PFOS MCLs

1. TP049126 Carr PFAS Treatment Facility
2. TP003006 Mountain
3. TP041094 Twinney PFAS Treatment Facility

Treatment Facilities Currently Inactive

1. TP017044
2. TP026064
3. TP034081
4. TP038149
5. TP040092
6. TP036086

Treatment Facilities Exceeding the PFOS MCL

The MCL for PFOS is 13 parts per trillion (ppt) and is based on a running annual average (RAA), in which the four most recent quarters of monitoring data are averaged.

Point of Entry (Treatment Facilities)	RAA 1Q2024 (ppt)	Treatment Facilities Running 1Q2024	POE exceeded 1 year deadline
TP001001	**17**		**X**
TP023057	**15**		**X**
TP033079	**14**		**X**
TP022055	**14**	**X**	

April 8, 2024 Repeat Notice

PRST STD
U.S. POSTAGE
PAID
PERMIT #29
PARAMUS, NJ

Ridgewood Water

111 North Maple Avenue
Ridgewood, NJ 07450

**********ECRWSSEDDM**********

Postal Customer

Exhibit F

2024 Drinking Water Quality Report

SUFFOLK COUNTY WATER AUTHORITY
SCWA

2024 DRINKING WATER QUALITY REPORT

For the period January 1, 2023 to December 31, 2023

(Including data for Brentwood, Dering Harbor, East Farmingdale, Fair Harbor, Riverside, Stony Brook, and West Neck Water Districts)

Este informe contiene informacion muy importante sobre su agua de beber.
Traduzcalo o hable con alguien que lo entienda bien.

TABLE OF CONTENTS

TO OUR CUSTOMERS

Charles Lefkowitz
Chairman,
SCWA

Jeffrey Szabo
Chief Executive Officer,
SCWA

Thomas Schneider
Director of
Water Quality and
Laboratory Services,
SCWA

Dear Suffolk County Water Authority Customer:

The Suffolk County Water Authority prides itself in maintaining higher standards for drinking water quality than required by regulations. Throughout this report, you will find detailed information on the results of the testing done during calendar year 2023 by our laboratory.

We test water at the wellhead, at various stages of treatment and within our distribution system for hundreds of chemical constituents. In 2023, we tested for 390 chemical constituents, which is 231 more than required by regulators. We also analyzed 92,847 samples that produced 191,047 tests with over 1.7 million results. SCWA goes above and beyond what is required to provide high quality drinking water.

We recognize the changing regulatory landscape regarding emerging contaminants. The U.S. Environmental Protect Agency proposed national drinking water standard for PFOA and PFOS of 4 parts per trillion, lower than the current standard in New York state of 10 parts per trillion. The New York State Department of Health proposed regulating additional PFAS compounds beyond PFOA and PFOS. While these regulations have not yet been finalized, SCWA is committed to surpassing all state and federal standards so that the water we deliver to our customers remains of the highest possible quality.

This report includes detailed information about the source of your drinking water supply, but if you have any questions, please do not hesitate to contact one of our drinking water quality professionals at 631-218-1138.

Charles Lefkowitz
Chairman

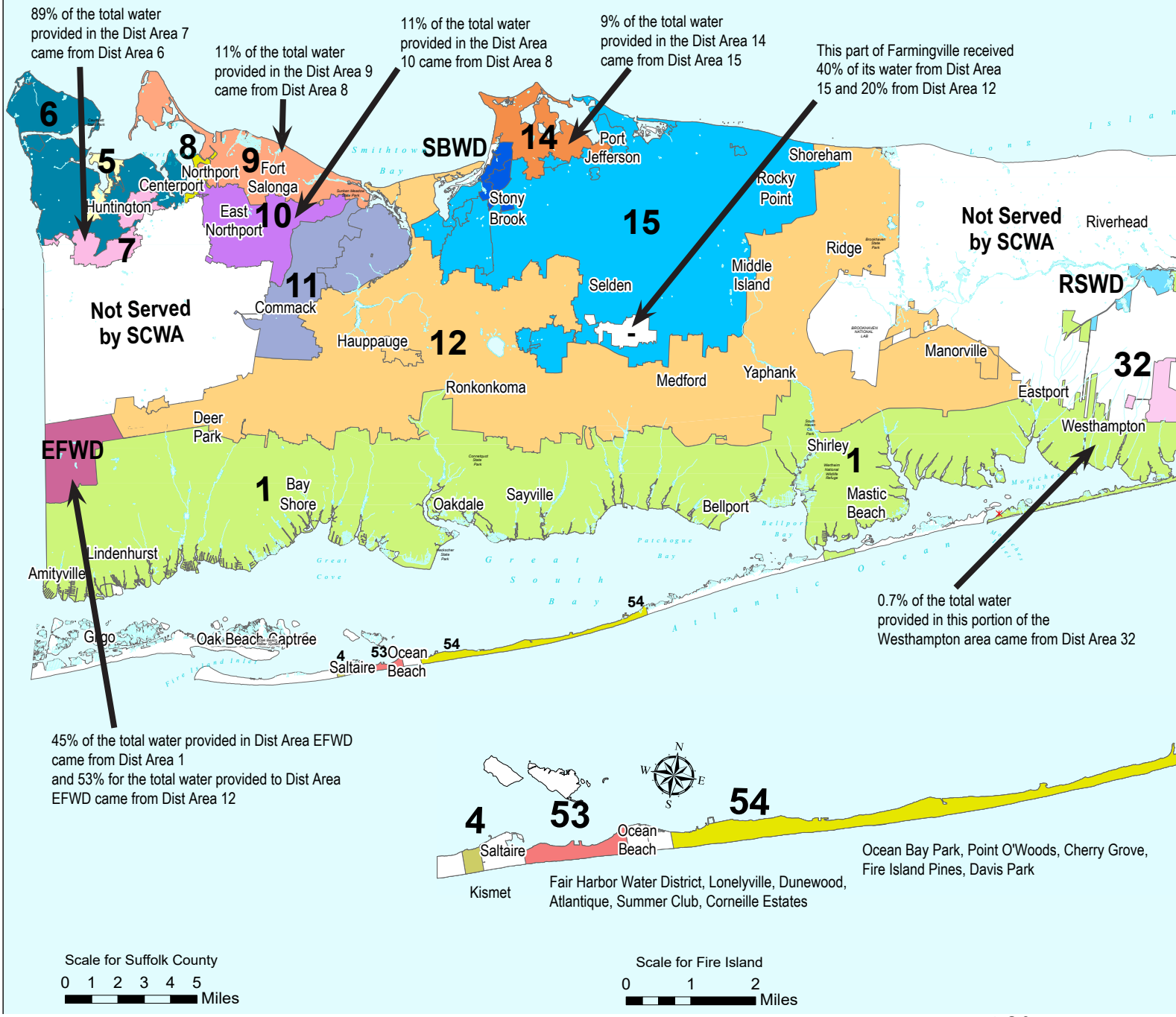
Thomas Schneider
Director of Water Quality and Laboratory Services

SCWA WATER DISTRIBUTION AREAS

Suffolk County is not flat. In fact, the ground surface elevation across the county varies from sea level to over 300 feet above sea level. Elevation is the key factor in determining water pressure, the lower the ground elevation, the higher the pressure. A single water system could not provide reasonable water pressure to every home. Some homes would have too much pressure and some would have no pressure at all. Therefore, the Water Authority has divided the system into 45 pressure zones. Distribution areas may encompass more than one pressure zone. There are 27 distribution areas.

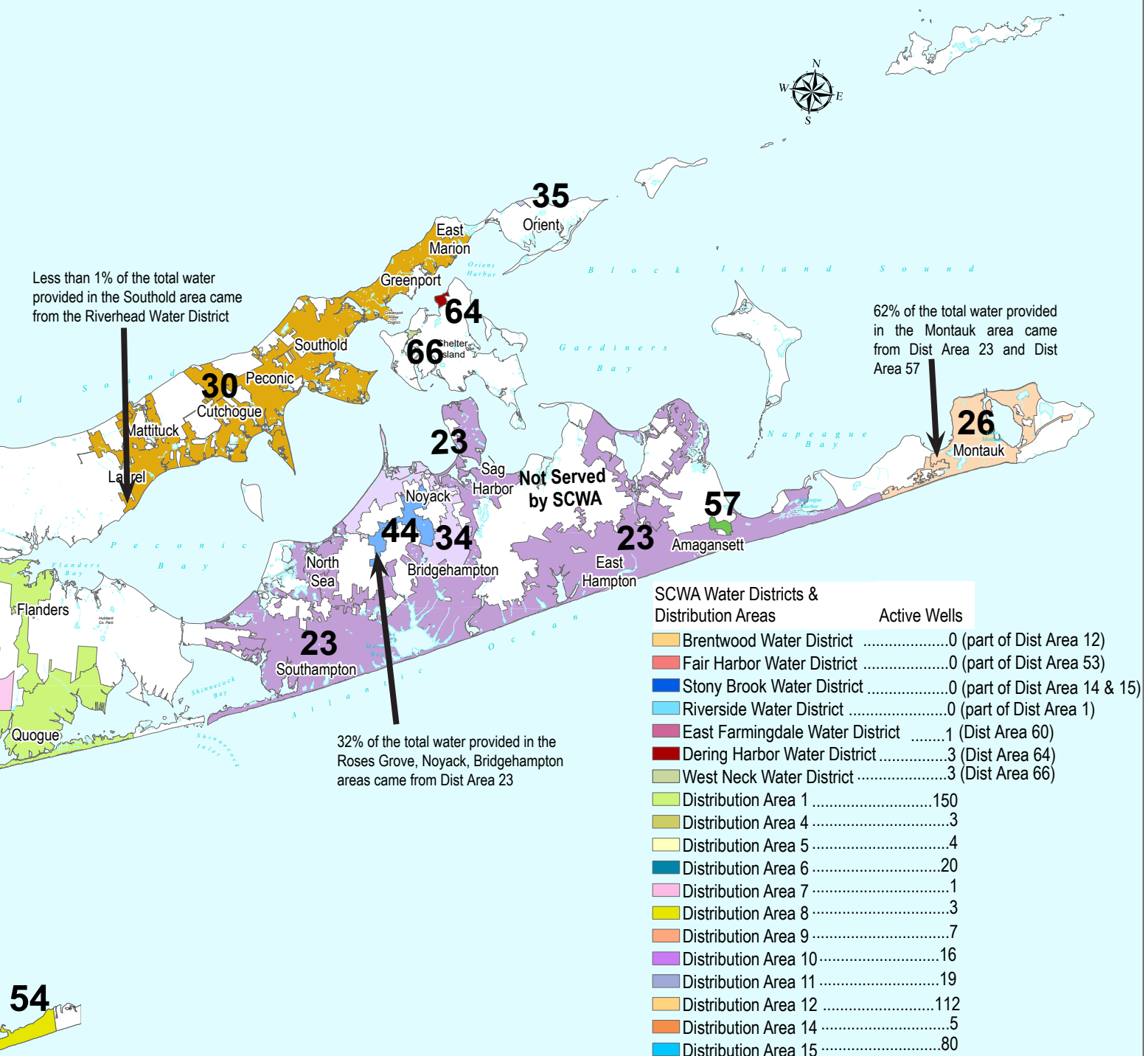
Each pressure zone is made up of pump stations, storage tanks, and/or booster stations which are designed to provide adequate water pressure to the elevations they serve. These facilities are connected by underground water pipes of various sizes. This piping network is called a distribution system. A pump station consists of at least one well and associated treatment facilities. The well provides access to the underground aquifer. We use a submersible pump powered by an electric motor to bring the water out of the ground, through the treatment facility and into the distribution system. The water can then be delivered to homes, fire hydrants, schools and wherever else it is needed. Any excess water goes into the storage tank where it is stored for later use. The water storage tank provides a stable operating pressure and can supply a lot of water in a short time in the event of an emergency. The wells are turned on and off as required to satisfy the water demand in the distribution system.

If you look at the distribution area map shown below, you will see the size of the areas range from very small, serving a few homes, to very large, serving tens of thousands of homes. The distribution areas are interconnected with booster pumps and/or automatic control valves. In the event of very high demands for water during peak summer usage or an emergency, such as a fire or main break, the booster pump or automatic valve will operate and supply additional water to the impacted area. This operation helps ensure that adequate water is available at all times. It also means that if your home is near the boundary of a distribution area, it may receive water from the adjacent distribution area on occasion. In a few areas, booster pumps routinely pump water from one zone to another. Please see the notes on the map for more information.



A80

SCWA WATER DISTRICT AREAS



SCWA Water Districts & Distribution Areas	Active Wells
Brentwood Water District	0 (part of Dist Area 12)
Fair Harbor Water District	0 (part of Dist Area 53)
Stony Brook Water District	0 (part of Dist Area 14 & 15)
Riverside Water District	0 (part of Dist Area 1)
East Farmingdale Water District	1 (Dist Area 60)
Dering Harbor Water District	3 (Dist Area 64)
West Neck Water District	3 (Dist Area 66)
Distribution Area 1	150
Distribution Area 4	3
Distribution Area 5	4
Distribution Area 6	20
Distribution Area 7	1
Distribution Area 8	3
Distribution Area 9	7
Distribution Area 10	16
Distribution Area 11	19
Distribution Area 12	112
Distribution Area 14	5
Distribution Area 15	80
Distribution Area 23	58
Distribution Area 26	12
Distribution Area 30	60
Distribution Area 32	2
Distribution Area 34	2
Distribution Area 35	3
Distribution Area 44	2
Distribution Area 53	6
Distribution Area 54	10
Distribution Area 57	2

TOTAL ACTIVE WELLS = 584

HOW TO READ YOUR WATER QUALITY DATA

WATER QUALITY BY DISTRIBUTION AREA

Naturally Occurring Compounds as well as Contaminants					Distribution Area 4 (E)			
					Range Of Readings			
(A) Detected Compound	(B) Likely Source	MCL (C)	MCLG (C)	Unit of Measure (D)	Low Value	High Value	Avg. Value	No. Of Tests (F)
(G) **Inorganics**								
Alkalinity to pH 4.5mg CaCO3/L	Naturally occurring	n/a	n/a	mg/L	30.4	54.2	40.1	8
Aluminum	Naturally occurring	n/a	n/a	mg/L	0.02	0.09	0.06	14
Ammonia, free	Some fertilizers, septic systems	n/a	n/a	mg/L	ND	ND	ND	8
Arsenic	Erosion of natural deposits	10	0	ug/L	ND	ND	ND	14
Barium	Erosion of natural deposits	2	2	mg/L	ND	ND	ND	14
Boron	Naturally occurring	n/a	n/a	mg/L	ND	0.11	ND	43
Bromide	Naturally occurring	n/a	n/a	mg/L	ND	ND	ND	14
Cadmium	Natural deposits, galvanized pipe	5	5	ug/L	ND	ND	ND	14
Calcium	Naturally occurring, pH control	n/a	n/a	mg/L	ND	1.0	0.5	43
CO2, calculated	Naturally occurring	n/a	n/a	mg/L	0.6	19.2	8.9	8
Chloride	Naturally occurring, salt water intrusion	250	n/a	mg/L	2.3	3.2	3.0	14
Chromium, total	Natural deposits	100	100	ug/L	ND	0.61	ND	14
Cobalt-59	Naturally occurring	n/a	n/a	ug/L	ND	ND	ND	14
Color	Naturally occurring metals or minerals	15	n/a	Color Units	ND	7	ND	8
Copper	Household plumbing	AL=1.3	1.3	mg/L	ND	0.03	ND	14
Dissolved Solids, total	Naturally occurring minerals and metals	n/a	n/a	mg/L	59	88	69	11
Fluoride	Erosion of natural deposits	2.2	n/a	mg/L	ND	ND	ND	14
Hardness, total	Measure of the calcium and magnesium	n/a	n/a	mg/L	ND	2.8	ND	43
Hexavalent Chromium	Erosion of natural deposits	n/a	n/a	ug/L	ND	0.67	0.13	12
Iron	Naturally occurring	300	n/a	ug/L	186	495	259	43
Lead	Household plumbing, lead solder	AL=15	0	ug/L	ND	ND	ND	14
Lithium	Naturally occurring	n/a	n/a	ug/L	3.5	4.2	3.8	14
Magnesium	Naturally occurring	n/a	n/a	mg/L	ND	ND	ND	43
Manganese	Naturally occurring	300	n/a	ug/L	ND	ND	ND	43
Molybdenum	Naturally occurring	n/a	n/a	ug/L	ND	ND	ND	14
Nickel	Alloys, coatings manufacturing, batteries	100	n/a	ug/L	ND	ND	ND	14
Nitrate	Natural deposits, fertilizer, septic tanks	10	10	mg/L	ND	ND	ND	14
Perchlorate	Fertilizers, solid fuel propellant, fireworks	15	5	ug/L	ND	ND	ND	8
Phosphate, total	Added to keep iron in solution	n/a	n/a	mg/L	ND	0.36	0.29	43
pH	Measure of water acidity or alkalinity	n/a	n/a	pH Units	6.5	8.2	7.1	8
pH, field	Measure of water acidity or alkalinity	n/a	n/a	pH Units	7.0	8.5	7.4	8
Potassium	Naturally occurring	n/a	n/a	mg/L	1.04	1.44	1.23	43
Silicon	Naturally occurring	n/a	n/a	mg/L	4.0	4.4	4.2	14
Sodium	Naturally occurring	n/a	n/a	mg/L	11.4	39.3	19.8	43

A **DETECTED COMPOUNDS** - compounds found during testing include naturally occurring compounds and contaminants. (On page 46 you will find the list of compounds that were not found in our drinking water).

B **LIKELY SOURCE** - where the detected compound might come from.

C **MAXIMUM CONTAMINANT LEVEL (MCL)** - the highest amount of a compound allowed in drinking water.

MAXIMUM CONTAMINANT LEVEL GOAL (MCLG) - there is no known or expected health risk for a compound in drinking water below this level.

A82

HOW TO READ YOUR WATER QUALITY DATA

D **UNITS OF MEASURE** - metric units used to describe the amount of the compound present (see chart below for definitions).

E **DISTRIBUTION AREA**
SCWA's service area, all the areas we supply water to, is divided into 27 distinct geographical areas called Distribution Areas. Each area is numbered. The map on pages 2 and 3 shows the boundaries of each area. Some towns have more than one Distribution Area so please read carefully. There is also an interactive map to help you define your Distribution Area. Once you know the Distribution Area number for your home, school, business or other area of interest, you can then find the water quality results in the tables located on pages 6 through 35.

F **RANGE OF READINGS FOR DETECTED COMPOUNDS**

LOW VALUE - the lowest amount of the chemical found in all water samples collected during the year for the distribution area noted.

HIGH VALUE - the highest amount of the chemical found in all water samples collected during the year for the distribution area noted.

AVERAGE VALUE - the average amount of the chemical found in all the water samples collected during the year for the distribution area noted. This is the amount of the chemical that would typically be present in your drinking water on any given day during the year.

NO. OF TESTS - the total number of water samples collected for the chemical during the year in the distribution area noted.

G **TYPES OF DETECTED COMPOUNDS**
Broad categories based on chemical characteristics.

Water Quality Data Key Terms, Definitions & Units of Measure

USEPA Health Advisory Levels (HAL): Identify the concentration of a contaminant in drinking water at which adverse health effects and/or aesthetic effects are not anticipated to occur over specific exposure durations. Health Advisory Levels are not to be construed as legally enforceable federal standards and are subject to change as new information becomes available.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Micrograms per liter (ug/L): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Milligrams per liter (mg/L): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Nanograms per liter (ng/L): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

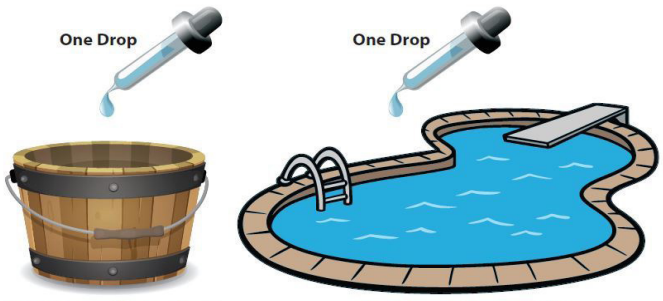
Picocuries per liter (pCi/L): Picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Micromhos per centimeter (umho/cm): A measure of the total amount of naturally occurring minerals in the water.

NA: Not Applicable

Non-Detects (ND): – Laboratory analysis indicates that the constituent is not present.



Units of Measure: It can be hard to wrap our minds around what a concentration of a contaminant actually means. The most commonly used units of measure for drinking water analysis are parts per million (ppm / mg/L) and parts per billion (ppb / ug/L) respectively. To help visualize these concentrations, imagine that 1 ppm is the same as one drop of water in a 13 gallon bucket, while 1 ppb is the same as one drop of water in a swimming pool (13,200 gallons)! Parts per trillion (ppt) or ng/L is an even smaller concentration. Imagine one drop of water in roughly 20 Olympic size swimming pools, or 1 inch in 16 million miles which is 600+ times around the earth.

A83

WATER QUALITY DATA BY DISTRIBUTION AREA

Unregulated Contaminant Monitoring Rule 5 (UCMR 5)

Every five years the EPA issues a regulation called the Unregulated Contaminant Monitoring Rule (UCMR), which lists 20 to 30 unregulated contaminants that must be monitored for by large public water systems. Used as a tool to find unregulated contaminants of concern in drinking water, the EPA can then determine whether to set drinking water standards or to require water providers to use certain treatment systems to reduce or eliminate these contaminants.

The UCMR 5 monitoring, which started in January 2023 and will continue through 2025, contains sampling and testing requirements for 30 chemicals:

- EPA Method 200.7 Rev. 2, Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Atomic Emission Spectrometry: Lithium
- EPA Method 533 Rev. 3.2, Determination of Per- and Polyfluoroalkyl Substances in Drinking Water by Isotope Dilution Anion Exchange Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry: 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid,1H,1H,2H,2H-Perfluorodecane Sulfonic Acid, 1H,1H,2H,2H-Perfluorohexane Sulfonic Acid, 1H,1H,2H,2H-Perfluorooctane Sulfonic Acid, 4,8-Dioxa-3H-perfluorononanoic Acid, 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic Acid, Hexafluoropropylene Oxide Dimer Acid, Nonafluoro-3-6-dioxaheptanoic Acid, Perfluoro(2-ethoxyethane)sulfonic Acid, Perfluoro-3-methoxypropanoic Acid, Perfluoro-4-methoxybutanoic Acid, Perfluorobutanesulfonic Acid, Perfluorobutanoic Acid, Perfluorodecanoic Acid, Perfluorododecanoic Acid, Perfluoroheptanesulfonic Acid, Perfluoroheptanoic Acid,Perfluorohexanesulfonic Acid, Perfluorohexanoic Acid, Perfluorononanoic Acid, Perfluorooctanesulfonic Acid, Perfluorooctanoic Acid, Perfluoropentanesulfonic Acid, Perfluoropentanoic Acid, Perfluoroundecanoic Acid
- EPA Method Method 537.1 Rev. 3, Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS): N-ethyl Perfluorooctanesulfonamidoacetic Acid, N-methyl Perfluorooctanesulfonamidoacetic Acid, Perfluorotetradecanoic Acid, Perfluorotridecanoic Acid

The UCMR 5 test results for each chemical detected, or found above the reporting level, are listed in the charts found on pages 6 through 8 for each distribution area tested in 2023.

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533 UCMR 5

EPA Method 533 UCMR 5					Distribution Area 1					Distribution Area 4					Distribution Area 5				
						Range of Readings					Range of Readings					Range of Readings			
Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	0.004	ND	68	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	0.005	ND	68	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	0.006	ND	68	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorooctanesulfonic Acid		0.01	n/a	ug/L	No	ND	0.005	ND	68	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorooctanoic Acid		0.01	n/a	ug/L	No	ND	0.006	ND	68	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	0.006	ND	68	No	ND	ND	ND	2	No	NA	NA	NA	0

* Refer to page 5 for Water Quality Data Terms, Definitions and Units of Measure including; MCL, MCLG, HAL.

All perfluoroalkyl substances, besides PFOA & PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 50 ug/L.

WATER QUALITY DATA BY DISTRIBUTION AREA

Unregulated Contaminant Monitoring Rule 5 (UCMR 5)

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533 UCMR 5

EPA Method 533 UCMR 5

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area 6 Violation Yes/No	Distribution Area 6 Range of Readings Low Value	Distribution Area 6 Range of Readings High Value	Distribution Area 6 Range of Readings Avg. Value	Distribution Area 6 No. of Tests	Distribution Area 7 Violation Yes/No	Distribution Area 7 Range of Readings Low Value	Distribution Area 7 Range of Readings High Value	Distribution Area 7 Range of Readings Avg. Value	Distribution Area 7 No. of Tests	Distribution Area 8 Violation Yes/No	Distribution Area 8 Range of Readings Low Value	Distribution Area 8 Range of Readings High Value	Distribution Area 8 Range of Readings Avg. Value	Distribution Area 8 No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorobutanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluoroheptanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorohexanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorononanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorooctanesulfonic Acid		0.01	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluorooctanoic Acid		0.01	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	2	No	NA	NA	NA	0
Perfluoropentanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	2	No	NA	NA	NA	0

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533 UCMR 5

EPA Method 533 UCMR 5

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area 9 Violation Yes/No	Distribution Area 9 Range of Readings Low Value	Distribution Area 9 Range of Readings High Value	Distribution Area 9 Range of Readings Avg. Value	Distribution Area 9 No. of Tests	Distribution Area 10 Violation Yes/No	Distribution Area 10 Range of Readings Low Value	Distribution Area 10 Range of Readings High Value	Distribution Area 10 Range of Readings Avg. Value	Distribution Area 10 No. of Tests	Distribution Area 11 Violation Yes/No	Distribution Area 11 Range of Readings Low Value	Distribution Area 11 Range of Readings High Value	Distribution Area 11 Range of Readings Avg. Value	Distribution Area 11 No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	2
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	2
Perfluorobutanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	2
Perfluoroheptanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	2
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	2
Perfluorohexanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	0.003	ND	6	No	ND	ND	ND	2
Perfluorononanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	2
Perfluorooctanesulfonic Acid		0.01	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	2
Perfluorooctanoic Acid		0.01	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	2
Perfluoropentanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	ND	0.003	ND	6	No	ND	ND	ND	2

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533 UCMR 5

EPA Method 533 UCMR 5

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area 12 Violation Yes/No	Distribution Area 12 Range of Readings Low Value	Distribution Area 12 Range of Readings High Value	Distribution Area 12 Range of Readings Avg. Value	Distribution Area 12 No. of Tests	Distribution Area 14 Violation Yes/No	Distribution Area 14 Range of Readings Low Value	Distribution Area 14 Range of Readings High Value	Distribution Area 14 Range of Readings Avg. Value	Distribution Area 14 No. of Tests	Distribution Area 15 Violation Yes/No	Distribution Area 15 Range of Readings Low Value	Distribution Area 15 Range of Readings High Value	Distribution Area 15 Range of Readings Avg. Value	Distribution Area 15 No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	54	No	NA	NA	NA	0	No	ND	ND	ND	34
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	0.004	ND	54	No	NA	NA	NA	0	No	ND	ND	ND	34
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	0.009	ND	54	No	NA	NA	NA	0	No	ND	0.007	ND	34
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	0.005	ND	54	No	NA	NA	NA	0	No	ND	ND	ND	34
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	0.011	ND	54	No	NA	NA	NA	0	No	ND	0.006	ND	34
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	0.010	ND	54	No	NA	NA	NA	0	No	ND	0.007	ND	34
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	54	No	NA	NA	NA	0	No	ND	ND	ND	34
Perfluorooctanesulfonic Acid		0.01	n/a	ug/L	No	ND	0.017	ND	54	No	NA	NA	NA	0	No	ND	0.004	ND	34
Perfluorooctanoic Acid		0.01	n/a	ug/L	No	ND	0.006	ND	54	No	NA	NA	NA	0	No	ND	0.006	ND	34
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	0.009	ND	54	No	NA	NA	NA	0	No	ND	0.013	ND	34

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533 UCMR 5

EPA Method 533 UCMR 5

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area 23 Violation Yes/No	Distribution Area 23 Range of Readings Low Value	Distribution Area 23 Range of Readings High Value	Distribution Area 23 Range of Readings Avg. Value	Distribution Area 23 No. of Tests	Distribution Area 26 Violation Yes/No	Distribution Area 26 Range of Readings Low Value	Distribution Area 26 Range of Readings High Value	Distribution Area 26 Range of Readings Avg. Value	Distribution Area 26 No. of Tests	Distribution Area 30 Violation Yes/No	Distribution Area 30 Range of Readings Low Value	Distribution Area 30 Range of Readings High Value	Distribution Area 30 Range of Readings Avg. Value	Distribution Area 30 No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	0.024	ND	28	No	ND	ND	ND	14	No	ND	ND	ND	24
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	ND	ND	28	No	ND	ND	ND	14	No	ND	0.004	ND	24
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	0.007	ND	28	No	ND	0.010	ND	14	No	ND	0.013	ND	24
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	0.010	ND	28	No	ND	ND	ND	14	No	ND	ND	ND	24
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	0.004	ND	28	No	ND	0.007	ND	14	No	ND	ND	ND	24
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	0.018	ND	28	No	ND	0.043	0.007	14	No	ND	0.011	ND	24
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	28	No	ND	ND	ND	14	No	ND	ND	ND	24
Perfluorooctanesulfonic Acid		0.01	n/a	ug/L	No	ND	ND	ND	28	No	ND	ND	ND	14	No	ND	0.004	ND	24
Perfluorooctanoic Acid		0.01	n/a	ug/L	No	ND	ND	ND	28	No	ND	ND	ND	14	No	ND	ND	ND	24
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	0.024	0.004	28	No	ND	0.039	0.006	14	No	ND	0.017	ND	24

* Refer to page 5 for Water Quality Data Terms, Definitions and Units of Measure including; MCL, MCLG, HAL.

All perfluoroalkyl substances, besides PFOA & PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 50 ug/L.

WATER QUALITY DATA BY DISTRIBUTION AREA

Unregulated Contaminant Monitoring Rule 5 (UCMR 5)

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533 UCMR 5

EPA Method 533 UCMR 5

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area 32					Distribution Area 34					Distribution Area 35				
					Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorooctanesulfonic Acid		0.01	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorooctanoic Acid		0.01	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533 UCMR 5

EPA Method 533 UCMR 5

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area 44					Distribution Area 53					Distribution Area 54				
					Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	8	No	ND	ND	ND	11
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	8	No	ND	ND	ND	11
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	8	No	ND	ND	ND	11
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	8	No	ND	ND	ND	11
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	8	No	ND	ND	ND	11
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	8	No	ND	ND	ND	11
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	8	No	ND	ND	ND	11
Perfluorooctanesulfonic Acid		0.01	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	8	No	ND	ND	ND	11
Perfluorooctanoic Acid		0.01	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	8	No	ND	ND	ND	11
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	8	No	ND	ND	ND	11

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533 UCMR 5

EPA Method 533 UCMR 5

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area 57					Distribution Area 64					Distribution Area EFWD				
					Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorooctanesulfonic Acid		0.01	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluorooctanoic Acid		0.01	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	2	No	ND	ND	ND	2

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533 UCMR 5

EPA Method 533 UCMR 5

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area RSWD					Distribution Area SBWD					Distribution Area WNWD				
					Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	ND	ND	ND	2
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	ND	ND	ND	2
Perfluorobutanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	ND	ND	ND	2
Perfluoroheptanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	ND	ND	ND	2
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	ND	ND	ND	2
Perfluorohexanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	ND	ND	ND	2
Perfluorononanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	ND	ND	ND	2
Perfluorooctanesulfonic Acid		0.01	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	ND	ND	ND	2
Perfluorooctanoic Acid		0.01	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	ND	ND	ND	2
Perfluoropentanoic Acid		50	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	ND	ND	ND	2

* Refer to page 5 for Water Quality Data Terms, Definitions and Units of Measure including; MCL, MCLG, HAL.

All perfluoroalkyl substances, besides PFOA & PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 50 ug/L.

WATER QUALITY DATA BY DISTRIBUTION AREA

Unregulated Perfluoroalkyl and Polyfluoroalkyl Substances Monitoring

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533

EPA Method 533					Distribution Area 1					Distribution Area 4					Distribution Area 5				
						Range of Readings					Range of Readings					Range of Readings			
Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	559	No	ND	ND	ND	12	No	ND	ND	ND	14
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	0.004	ND	559	No	ND	ND	ND	12	No	ND	ND	ND	14
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	0.040†	ND	559	No	ND	ND	ND	12	No	ND	ND	ND	14
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	0.007	ND	559	No	ND	ND	ND	12	No	ND	ND	ND	14
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	0.013	ND	559	No	ND	ND	ND	12	No	ND	ND	ND	14
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	0.007	ND	559	No	ND	ND	ND	12	No	ND	ND	ND	14
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	0.006	ND	559	No	ND	ND	ND	12	No	ND	ND	ND	14
Perfluoropentanesulfonic Acid		50	n/a	ug/L	No	ND	0.002	ND	559	No	ND	ND	ND	12	No	ND	ND	ND	14
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	0.008	ND	559	No	ND	ND	ND	12	No	ND	ND	ND	14

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533

EPA Method 533					Distribution Area 6					Distribution Area 7					Distribution Area 8				
						Range of Readings					Range of Readings					Range of Readings			
Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	6	No	ND	ND	ND	12
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	6	No	ND	ND	ND	12
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	0.006	ND	68	No	ND	ND	ND	6	No	ND	ND	ND	12
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	6	No	ND	ND	ND	12
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	6	No	ND	ND	ND	12
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	6	No	ND	ND	ND	12
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	6	No	ND	ND	ND	12
Perfluoropentanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	6	No	ND	ND	ND	12
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	6	No	ND	ND	ND	12

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533

EPA Method 533					Distribution Area 9					Distribution Area 10					Distribution Area 11				
						Range of Readings					Range of Readings					Range of Readings			
Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	24	No	ND	ND	ND	59	No	ND	ND	ND	69
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	ND	ND	24	No	ND	ND	ND	59	No	ND	ND	ND	69
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	ND	ND	24	No	ND	ND	ND	59	No	ND	ND	ND	69
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	ND	ND	24	No	ND	0.003	ND	59	No	ND	0.002	ND	69
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	24	No	ND	0.002	ND	59	No	ND	0.002	ND	69
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	ND	ND	24	No	ND	0.005	ND	59	No	ND	0.005	ND	69
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	24	No	ND	ND	ND	59	No	ND	ND	ND	69
Perfluoropentanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	24	No	ND	ND	ND	59	No	ND	ND	ND	69
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	ND	ND	24	No	ND	0.008	ND	59	No	ND	0.006	ND	69

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533

EPA Method 533					Distribution Area 12					Distribution Area 14					Distribution Area 15				
						Range of Readings					Range of Readings					Range of Readings			
Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	416	No	ND	ND	ND	18	No	ND	ND	ND	277
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	0.006	ND	416	No	ND	ND	ND	18	No	ND	0.005	ND	277
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	0.015	ND	416	No	ND	ND	ND	18	No	ND	0.008	ND	277
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	0.006	ND	416	No	ND	ND	ND	18	No	ND	0.004	ND	277
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	0.013	ND	416	No	ND	ND	ND	18	No	ND	0.010	ND	277
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	0.012	ND	416	No	ND	ND	ND	18	No	ND	0.015	0.002	277
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	0.003	ND	416	No	ND	ND	ND	18	No	ND	0.006	ND	277
Perfluoropentanesulfonic Acid		50	n/a	ug/L	No	ND	0.002	ND	416	No	ND	ND	ND	18	No	ND	0.003	ND	277
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	0.015	0.002	416	No	ND	ND	ND	18	No	ND	0.017	0.002	277

† The sample from 12/13/2023 had Perfluorobutanoic Acid result of 40ppt. The results are due to Perfluorobutanoic Acid contamination during the extraction process. An additional sample was collected on 01/03/2024 and the Perfluorobutanoic Acid was non-detect.

* Refer to page 5 for Water Quality Data Terms, Definitions and Units of Measure including; MCL, MCLG, HAL.

All perfluoroalkyl substances, besides PFOA & PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 50 ug/L.

WATER QUALITY DATA BY DISTRIBUTION AREA

Unregulated Perfluoroalkyl and Polyfluoroalkyl Substances Monitoring (cont'd)

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533

EPA Method 533

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area 23 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 26 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 30 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	0.022	ND	176	No	ND	ND	ND	45	No	ND	ND	ND	160
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	0.002	ND	176	No	ND	ND	ND	45	No	ND	0.005	ND	160
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	0.006	ND	176	No	ND	0.008	ND	45	No	ND	0.031	ND	160
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	0.007	ND	176	No	ND	0.002	ND	45	No	ND	0.002	ND	160
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	0.006	ND	176	No	ND	0.008	ND	45	No	ND	0.002	ND	160
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	0.014	ND	176	No	ND	0.045	0.005	45	No	ND	0.004	ND	160
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	176	No	ND	ND	ND	45	No	ND	ND	ND	160
Perfluoropentanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	176	No	ND	ND	ND	45	No	ND	ND	ND	160
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	0.025	ND	176	No	ND	0.037	0.004	45	No	ND	0.006	ND	160

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533

EPA Method 533

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area 32 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 34 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 35 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	10
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	10
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	10
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	10
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	10
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	10
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	10
Perfluoropentanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	10
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	10

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533

EPA Method 533

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area 44 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 53 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 54 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	28	No	ND	ND	ND	46
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	28	No	ND	ND	ND	46
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	28	No	ND	ND	ND	46
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	28	No	ND	ND	ND	46
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	28	No	ND	ND	ND	46
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	28	No	ND	ND	ND	46
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	28	No	ND	ND	ND	46
Perfluoropentanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	28	No	ND	ND	ND	46
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	28	No	ND	ND	ND	46

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533

EPA Method 533

Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Distribution Area 57 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 64 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area EFWD Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	11	No	ND	ND	ND	6
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	11	No	ND	ND	ND	6
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	11	No	ND	ND	ND	6
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	11	No	ND	ND	ND	6
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	11	No	ND	ND	ND	6
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	11	No	ND	ND	ND	6
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	11	No	ND	ND	ND	6
Perfluoropentanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	11	No	ND	ND	ND	6
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	11	No	ND	ND	ND	6

* Refer to page 5 for Water Quality Data Terms, Definitions and Units of Measure including; MCL, MCLG, HAL.

All perfluoroalkyl substances, besides PFOA & PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 50 ug/L.

A88

WATER QUALITY DATA BY DISTRIBUTION AREA

Unregulated Perfluoroalkyl and Polyfluoroalkyl Substances Monitoring (cont'd)

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533

EPA Method 533					Distribution Area RSWD					Distribution Area SBWD					Distribution Area WNWD				
						Range of Readings					Range of Readings					Range of Readings			
Detected Compound	Likely Source	MCL	MCLG or HAL*	Unit of Measure	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid	Released into the environment from use in commercial and industrial applications	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	13
Perfluorobutanesulfonic Acid		50	2.0	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	0.003	ND	13
Perfluorobutanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	13
Perfluoroheptanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	0.003	ND	13
Perfluorohexanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	13
Perfluorohexanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	0.002	ND	13
Perfluorononanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	13
Perfluoropentanesulfonic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	13
Perfluoropentanoic Acid		50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	0.003	ND	13

* Refer to page 5 for Water Quality Data Terms, Definitions and Units of Measure including; MCL, MCLG, HAL.

All perfluoroalkyl substances, besides PFOA & PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 50 ug/L.

A89

WATER QUALITY DATA BY DISTRIBUTION AREA

Regulated Perfluoroalkyl and Polyfluoroalkyl Substances Monitoring

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533

Detected Compound	Likely Source	MCL	MCLG or HAL**	Unit of Measure	Distribution Area 1					Distribution Area 4					Distribution Area 5				
					Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by NYS Approved SCWA PFAAS Method & EPA Method 533																			
Perfluorooctanesulfonic Acid	Released into the environment from widespread use in commercial and industrial applications	*0.010	n/a	ug/L	No	ND	0.035	ND	559	No	ND	ND	ND	12	No	ND	ND	ND	14
Perfluorooctanooic Acid		*0.010	n/a	ug/L	No	ND	0.006	ND	559	No	ND	ND	ND	12	No	ND	ND	ND	14

Detected Compound	Likely Source	MCL	MCLG or HAL**	Unit of Measure	Distribution Area 6					Distribution Area 7					Distribution Area 8				
					Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by NYS Approved SCWA PFAAS Method & EPA Method 533																			
Perfluorooctanesulfonic Acid	Released into the environment from widespread use in commercial and industrial applications	*0.010	n/a	ug/L	No	ND	ND	ND	68	No	ND	ND	ND	6	No	ND	ND	ND	12
Perfluorooctanooic Acid		*0.010	n/a	ug/L	No	ND	0.002	ND	68	No	ND	ND	ND	6	No	ND	ND	ND	12

Detected Compound	Likely Source	MCL	MCLG or HAL**	Unit of Measure	Distribution Area 9					Distribution Area 10					Distribution Area 11				
					Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by NYS Approved SCWA PFAAS Method & EPA Method 533																			
Perfluorooctanesulfonic Acid	Released into the environment from widespread use in commercial and industrial applications	*0.010	n/a	ug/L	No	ND	ND	ND	24	No	ND	0.002	ND	59	No	ND	0.004	ND	69
Perfluorooctanooic Acid		*0.010	n/a	ug/L	No	ND	ND	ND	24	No	ND	0.002	ND	59	No	ND	0.005	ND	69

Detected Compound	Likely Source	MCL	MCLG or HAL**	Unit of Measure	Distribution Area 12					Distribution Area 14					Distribution Area 15				
					Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by NYS Approved SCWA PFAAS Method & EPA Method 533																			
Perfluorooctanesulfonic Acid	Released into the environment from widespread use in commercial and industrial applications	*0.010	n/a	ug/L	No	ND	0.012	ND	416	No	ND	ND	ND	18	No	ND	0.007	ND	277
Perfluorooctanooic Acid		*0.010	n/a	ug/L	No	ND	0.008	ND	416	No	ND	ND	ND	18	No	ND	0.008	0.002	277

Detected Compound	Likely Source	MCL	MCLG or HAL**	Unit of Measure	Distribution Area 23					Distribution Area 26					Distribution Area 30				
					Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by NYS Approved SCWA PFAAS Method & EPA Method 533																			
Perfluorooctanesulfonic Acid	Released into the environment from widespread use in commercial and industrial applications	*0.010	n/a	ug/L	No	ND	0.005	ND	176	No	ND	ND	ND	45	No	ND	0.004	ND	160
Perfluorooctanooic Acid		*0.010	n/a	ug/L	No	ND	0.003	ND	176	No	ND	0.003	ND	45	No	ND	0.003	ND	160

Detected Compound	Likely Source	MCL	MCLG or HAL**	Unit of Measure	Distribution Area 32					Distribution Area 34					Distribution Area 35				
					Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by NYS Approved SCWA PFAAS Method & EPA Method 533																			
Perfluorooctanesulfonic Acid	Released into the environment from widespread use in commercial and industrial applications	*0.010	n/a	ug/L	No	ND	0.002	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	10
Perfluorooctanooic Acid		*0.010	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	10

* August 26, 2020 NYS adopts an MCL of 0.010 ppb for Perfluoroctanoic Acid (PFOA) & Perfluorooctanesulfonic Acis (PFOS), see page 34.

** Refer to page 5 for Water Quality Data Terms, Definitions and Units of Measure including; MCL, MCLG, HAL.

A90

WATER QUALITY DATA BY DISTRIBUTION AREA

Regulated Perfluoroalkyl and Polyfluoroalkyl Substances Monitoring (cont'd)

Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by EPA Method 533

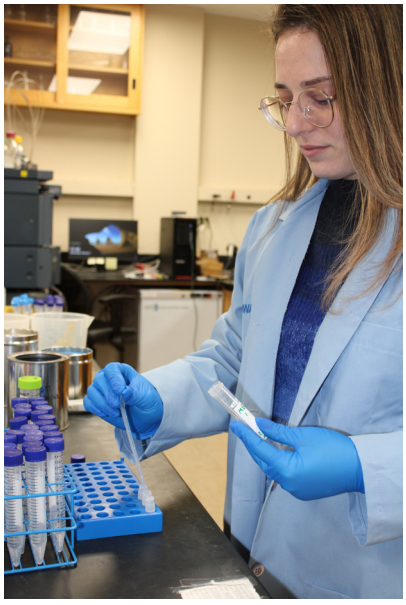
Detected Compound	Likely Source	MCL	MCLG or HAL**	Unit of Measure	Distribution Area 44					Distribution Area 53					Distribution Area 54				
					Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by NYS Approved SCWA PFAAS Method & EPA Method 533																			
Perfluorooctanesulfonic Acid	Released into the environment from widespread use in commercial and industrial applications	*0.010	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	28	No	ND	ND	ND	46
Perfluorooctanooic Acid		*0.010	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	28	No	ND	ND	ND	46

Detected Compound	Likely Source	MCL	MCLG or HAL**	Unit of Measure	Distribution Area 57					Distribution Area 64					Distribution Area EFWD				
					Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by NYS Approved SCWA PFAAS Method & EPA Method 533																			
Perfluorooctanesulfonic Acid	Released into the environment from widespread use in commercial and industrial applications	*0.010	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	11	No	ND	ND	ND	6
Perfluorooctanooic Acid		*0.010	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	11	No	ND	ND	ND	6

Detected Compound	Likely Source	MCL	MCLG or HAL**	Unit of Measure	Distribution Area RSWD					Distribution Area SBWD					Distribution Area WNWD				
					Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Per- and Polyfluoroalkyl Substances - Analysis Performed by NYS Approved SCWA PFAAS Method & EPA Method 533																			
Perfluorooctanesulfonic Acid	Released into the environment from widespread use in commercial and industrial applications	*0.010	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	0.007	0.002	13
Perfluorooctanooic Acid		*0.010	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	0.006	0.002	13

* August 26, 2020 NYS adopts an MCL of 0.010 ppb for Perfluoroctanoic Acid (PFOA) & Perfluorooctanesulfonic Acis (PFOS), see page 34.

** Refer to page 5 for Water Quality Data Terms, Definitions and Units of Measure including; MCL, MCLG, HAL.



A91

WATER QUALITY DATA BY DISTRIBUTION AREA

Pharmaceuticals and Personal Care Products (PPCPs) Monitoring

PPCPs are a diverse collection of thousands of chemical substances, including prescription and over the counter therapeutic drugs, veterinary drugs, fragrances, cosmetics, lotions such as sunscreen and insect repellents, diagnostic agents and vitamins. PPCPs from bodily excretion, bathing, and disposal of unwanted medications to septic systems, sewers or trash have the potential to enter our drinking water. Information on how to properly dispose of unwanted pharmaceuticals can be found at the link below:

https://nepis.epa.gov/Exe/tiff2png.cgi/P1007BCF.PNG?-r+75+-g+7+D%3A%5CZYFILES%5CINDEX%20DATA%5C06THRU10%5CTIFF%5C00000773%5CP1007BCF.TIF%20

The detection and quantification of these chemicals has only recently been possible due to advances in laboratory testing technology.

Presently the EPA has no health standards or guidelines for PPCPs in drinking water and does not require testing. In 2023 all of our wells were tested for 35 PPCPs; Acesulfame-K, Carbamazepine, Gemfibrozil, Glycyrrhizic Acid, 5-(4-Hydroxyphenyl)-5-Phenylhydantoin, Ibuprofen, Imidacloprid, Meprobamate, Phenobarbital, Primidone, Saccharin, Secobarbital, Sodium Cyclamate, Sucralose and Sulfamethoxazole were detected. The concentrations found are at levels far below medical doses, and have no known health effects.

Wherever possible, we are using granular activated carbon filtration and blending wells to remove these trace levels from the water we provide to you. Information on these pharmaceutical drugs and the results for each distribution area can be found in the tables below and on pages 15-16.

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 1					Distribution Area 4					Distribution Area 5				
					Range of Readings					Range of Readings					Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Pesticides and Pharmaceuticals																			
Acesulfame-K	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	2.55	0.06	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Carbamazepine	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Gemfibrozil	Lipid lowering drug	50	n/a	ug/L	No	ND	0.28	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Glycyrrhizic Acid	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10
5-(4-Hydroxyphenyl)-5-Phenylhydantoin	Used for determining drug levels in the body	50	n/a	ug/L	No	ND	0.31	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Ibuprofen	Anti-inflammatory drug	50	n/a	ug/L	No	ND	ND	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Imidacloprid	Used as a pesticide	50	n/a	ug/L	No	ND	ND	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Meprobamate	Antianxiety drug	50	n/a	ug/L	No	ND	ND	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Phenobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	0.51	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Primidone	Pharmaceutical anticonvulsant drug	50	n/a	ug/L	No	ND	0.15	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Saccharin	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.16	ND	343	No	ND	ND	ND	8	No	ND	0.07	ND	10
Secobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	0.06	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Sodium Cyclamate	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.32	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Sucralose	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	3.95	0.08	343	No	ND	ND	ND	8	No	ND	ND	ND	10
Sulfamethoxazole	Antibiotic	50	n/a	ug/L	No	ND	0.08	ND	343	No	ND	ND	ND	8	No	ND	ND	ND	10

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 6					Distribution Area 7					Distribution Area 8				
					Range of Readings					Range of Readings					Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Pesticides and Pharmaceuticals																			
Acesulfame-K	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.27	ND	45	No	ND	ND	ND	4	No	ND	0.17	0.07	8
Carbamazepine	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
Gemfibrozil	Lipid lowering drug	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
Glycyrrhizic Acid	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
5-(4-Hydroxyphenyl)-5-Phenylhydantoin	Used for determining drug levels in the body	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
Ibuprofen	Anti-inflammatory drug	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
Imidacloprid	Used as a pesticide	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
Meprobamate	Antianxiety drug	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
Phenobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
Primidone	Pharmaceutical anticonvulsant drug	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
Saccharin	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
Secobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
Sodium Cyclamate	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8
Sucralose	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.05	ND	45	No	ND	ND	ND	4	No	ND	0.06	ND	8
Sulfamethoxazole	Antibiotic	50	n/a	ug/L	No	ND	ND	ND	45	No	ND	ND	ND	4	No	ND	ND	ND	8

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 9					Distribution Area 10					Distribution Area 11				
					Range of Readings					Range of Readings					Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Pesticides and Pharmaceuticals																			
Acesulfame-K	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.14	0.05	20	No	ND	0.39	0.07	37	No	ND	1.43	0.15	43
Carbamazepine	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43
Gemfibrozil	Lipid lowering drug	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43
Glycyrrhizic Acid	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	0.12	ND	37	No	ND	ND	ND	43
5-(4-Hydroxyphenyl)-5-Phenylhydantoin	Used for determining drug levels in the body	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43
Ibuprofen	Anti-inflammatory drug	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43
Imidacloprid	Used as a pesticide	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43
Meprobamate	Antianxiety drug	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43
Phenobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43
Primidone	Pharmaceutical anticonvulsant drug	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43
Saccharin	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43
Secobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43
Sodium Cyclamate	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43
Sucralose	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	0.11	ND	37	No	ND	0.47	0.06	43
Sulfamethoxazole	Antibiotic	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	37	No	ND	ND	ND	43

A92

WATER QUALITY DATA BY DISTRIBUTION AREA

Pharmaceuticals and Personal Care Products (PPCPs) Monitoring (cont'd)

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 12 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 14 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 15 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Pesticides and Pharmaceuticals																			
Acesulfame-K	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	2.44	0.13	275	No	ND	0.51	0.07	15	No	ND	3.29	0.29	192
Carbamazepine	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	275	No	ND	ND	ND	15	No	ND	0.07	ND	192
Gemfibrozil	Lipid lowering drug	50	n/a	ug/L	No	ND	0.06	ND	275	No	ND	ND	ND	15	No	ND	0.07	ND	192
Glycyrrhizic Acid	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	275	No	ND	ND	ND	15	No	ND	ND	ND	192
5-(4-Hydroxyphenyl)-5-Phenylhydantoin	Used for determining drug levels in the body	50	n/a	ug/L	No	ND	0.17	ND	275	No	ND	ND	ND	15	No	ND	ND	ND	192
Ibuprofen	Anti-inflammatory drug	50	n/a	ug/L	No	ND	0.39	ND	275	No	ND	ND	ND	15	No	ND	0.21	ND	192
Imidacloprid	Used as a pesticide	50	n/a	ug/L	No	ND	0.07	ND	275	No	ND	ND	ND	15	No	ND	ND	ND	192
Meprobamate	Antianxiety drug	50	n/a	ug/L	No	ND	0.05	ND	275	No	ND	ND	ND	15	No	ND	ND	ND	192
Phenobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	0.46	ND	275	No	ND	ND	ND	15	No	ND	0.07	ND	192
Primidone	Pharmaceutical anticonvulsant drug	50	n/a	ug/L	No	ND	ND	ND	275	No	ND	ND	ND	15	No	ND	ND	ND	192
Saccharin	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.39	ND	275	No	ND	ND	ND	15	No	ND	0.05	ND	192
Secobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	275	No	ND	ND	ND	15	No	ND	ND	ND	192
Sodium Cyclamate	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.18	ND	275	No	ND	ND	ND	15	No	ND	ND	ND	192
Sucralose	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	3.16	0.30	275	No	ND	0.34	0.05	15	No	ND	3.20	0.38	191
Sulfamethoxazole	Antibiotic	50	n/a	ug/L	No	ND	ND	ND	275	No	ND	ND	ND	15	No	ND	ND	ND	192

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 23 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 26 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 30 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Pesticides and Pharmaceuticals																			
Acesulfame-K	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.84	0.14	130	No	ND	1.01	0.31	29	No	ND	2.09	0.16	133
Carbamazepine	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	130	No	ND	ND	ND	29	No	ND	ND	ND	133
Gemfibrozil	Lipid lowering drug	50	n/a	ug/L	No	ND	ND	ND	130	No	ND	ND	ND	29	No	ND	ND	ND	133
Glycyrrhizic Acid	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	130	No	ND	0.13	ND	29	No	ND	ND	ND	133
5-(4-Hydroxyphenyl)-5-Phenylhydantoin	Used for determining drug levels in the body	50	n/a	ug/L	No	ND	ND	ND	130	No	ND	ND	ND	29	No	ND	ND	ND	133
Ibuprofen	Anti-inflammatory drug	50	n/a	ug/L	No	ND	ND	ND	130	No	ND	ND	ND	29	No	ND	0.11	ND	133
Imidacloprid	Used as a pesticide	50	n/a	ug/L	No	ND	0.07	ND	130	No	ND	ND	ND	29	No	ND	0.18	ND	133
Meprobamate	Antianxiety drug	50	n/a	ug/L	No	ND	ND	ND	130	No	ND	ND	ND	29	No	ND	ND	ND	133
Phenobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	130	No	ND	ND	ND	29	No	ND	ND	ND	133
Primidone	Pharmaceutical anticonvulsant drug	50	n/a	ug/L	No	ND	ND	ND	130	No	ND	ND	ND	29	No	ND	ND	ND	133
Saccharin	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.06	ND	130	No	ND	2.15	0.16	29	No	ND	ND	ND	133
Secobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	130	No	ND	ND	ND	29	No	ND	0.34	ND	133
Sodium Cyclamate	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	130	No	ND	0.08	ND	29	No	ND	0.05	ND	133
Sucralose	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.97	0.14	130	No	ND	0.75	0.30	29	No	ND	1.18	0.21	133
Sulfamethoxazole	Antibiotic	50	n/a	ug/L	No	ND	ND	ND	130	No	ND	ND	ND	29	No	ND	ND	ND	133

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 32 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 34 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 35 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Pesticides and Pharmaceuticals																			
Acesulfame-K	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	0.11	ND	6	No	ND	ND	ND	10
Carbamazepine	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Gemfibrozil	Lipid lowering drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Glycyrrhizic Acid	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
5-(4-Hydroxyphenyl)-5-Phenylhydantoin	Used for determining drug levels in the body	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Ibuprofen	Anti-inflammatory drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Imidacloprid	Used as a pesticide	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Meprobamate	Antianxiety drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Phenobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Primidone	Pharmaceutical anticonvulsant drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Saccharin	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.05	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Secobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Sodium Cyclamate	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Sucralose	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.06	ND	6	No	ND	0.08	0.05	6	No	ND	ND	ND	10
Sulfamethoxazole	Antibiotic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 44 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 53 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Distribution Area 54 Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Pesticides and Pharmaceuticals																			
Acesulfame-K	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.10	0.06	6	No	ND	0.13	ND	19	No	ND	ND	ND	30
Carbamazepine	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
Gemfibrozil	Lipid lowering drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
Glycyrrhizic Acid	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
5-(4-Hydroxyphenyl)-5-Phenylhydantoin	Used for determining drug levels in the body	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
Ibuprofen	Anti-inflammatory drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
Imidacloprid	Used as a pesticide	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
Meprobamate	Antianxiety drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
Phenobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
Primidone	Pharmaceutical anticonvulsant drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
Saccharin	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
Secobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
Sodium Cyclamate	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30
Sucralose	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.23	0.11	6	No	ND	0.09	ND	19	No	ND	ND	ND	30
Sulfamethoxazole	Antibiotic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	19	No	ND	ND	ND	30

A93

WATER QUALITY DATA BY DISTRIBUTION AREA

Pharmaceuticals and Personal Care Products (PPCPs) Monitoring (cont'd)

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 57 Range of Readings					Distribution Area 64 Range of Readings					Distribution Area EFWD Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Pesticides and Pharmaceuticals																			
Acesulfame-K	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.22	0.14	6	No	ND	0.17	0.06	10	No	ND	ND	ND	6
Carbamazepine	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
Gemfibrozil	Lipid lowering drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
Glycyrrhizic Acid	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
5-(4-Hydroxyphenyl)-5-Phenylhydantoin	Used for determining drug levels in the body	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
Ibuprofen	Anti-inflammatory drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
Imidacloprid	Used as a pesticide	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
Meprobamate	Antianxiety drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
Phenobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
Primidone	Pharmaceutical anticonvulsant drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
Saccharin	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
Secobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
Sodium Cyclamate	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6
Sucralose	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.65	0.29	6	No	ND	0.30	0.11	10	No	ND	ND	ND	6
Sulfamethoxazole	Antibiotic	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	10	No	ND	ND	ND	6

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area RSWD Range of Readings					Distribution Area SBWD Range of Readings					Distribution Area WNWD Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Synthetic Organic Compounds including Pesticides and Pharmaceuticals																			
Acesulfame-K	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	0.18	0.06	4	No	ND	0.60	0.15	9
Carbamazepine	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	9
Gemfibrozil	Lipid lowering drug	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	9
Glycyrrhizic Acid	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	9
5-(4-Hydroxyphenyl)-5-Phenylhydantoin	Used for determining drug levels in the body	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	9
Ibuprofen	Anti-inflammatory drug	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	0.23	0.08	9
Imidacloprid	Used as a pesticide	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	9
Meprobamate	Antianxiety drug	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	9
Phenobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	9
Primidone	Pharmaceutical anticonvulsant drug	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	9
Saccharin	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	0.06	ND	9
Secobarbital	Anticonvulsant, mood stabilizing drug	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	9
Sodium Cyclamate	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	9
Sucralose	Incomplete removal during wastewater treatment, home septic	50	n/a	ug/L	No	ND	0.06	ND	2	No	ND	ND	ND	4	No	ND	0.90	0.23	9
Sulfamethoxazole	Antibiotic	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	9

SAFE DISPOSAL OF PHARMACEUTICALS

Pharmaceutical contamination of drinking water is an important emerging concern. Changing our practices today can prevent future pollution of our only source of drinking water. Become a part of the solution to help stop the threat of discarded pharmaceuticals finding their way into our groundwater, bays and estuaries. Simply take your unused medications to any of the safe disposal locations on Long Island: Walgreens and CVS have safe drop boxes and accept medical disposals at specific locations across Long Island. Also, most police precincts in Suffolk County will accept prescription drugs for disposal. A list can be found here:

https://www.health.ny.gov/professionals/narcotic/medication_drop_boxes/suffolk.htm

WATER QUALITY DATA BY DISTRIBUTION AREA

Disinfectants and Disinfection Byproducts

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 1					Distribution Area 4					Distribution Area 5				
					Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests
Disinfectant and Disinfection Byproducts (MCL is the sum of the four starred compounds shown below)**																			
Bromochloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	1.50	ND	40	No	NA	NA	NA	0	No	ND	ND	ND	6
Bromodichloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	ND	ND	40	No	NA	NA	NA	0	No	ND	ND	ND	6
Bromodichloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	4.59	0.28	471	No	ND	0.75	0.27	8	No	ND	2.12	ND	61
Bromoform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	2.15	ND	471	No	ND	ND	ND	8	No	ND	1.89	ND	61
Chlorate	Byproduct of chlorination	n/a	n/a	mg/L	No	ND	0.79	0.10	362	No	0.04	0.08	0.06	8	No	0.05	0.50	0.11	10
Chloroform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	5.73	0.49	471	No	ND	2.81	0.73	8	No	ND	1.56	ND	61
Dibromoacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	1.04	ND	40	No	NA	NA	NA	0	No	ND	ND	ND	6
Dibromochloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	4.12	0.26	471	No	ND	ND	ND	8	No	ND	1.76	ND	61
Dichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	1.87	ND	40	No	NA	NA	NA	0	No	ND	ND	ND	6
Free Chlorine	Used as a disinfectant	4	n/a	mg/L	No	ND	1.91	0.96	3,884	No	0.41	1.50	1.12	42	No	0.34	1.61	0.97	155
Trichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	0.86	ND	40	No	NA	NA	NA	0	No	ND	ND	ND	6
(*MCL is the sum of the starred compounds shown above)																			

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 6					Distribution Area 7					Distribution Area 8				
					Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests
Disinfectant and Disinfection Byproducts (MCL is the sum of the four starred compounds shown below)**																			
Bromochloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	1.22	ND	12	No	ND	1.16	ND	6	No	NA	NA	NA	0
Bromodichloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	ND	ND	12	No	ND	ND	ND	6	No	NA	NA	NA	0
Bromodichloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	3.34	ND	197	No	ND	0.90	ND	22	No	ND	ND	ND	10
Bromoform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	1.15	ND	197	No	ND	0.48	ND	22	No	ND	ND	ND	10
Chlorate	Byproduct of chlorination	n/a	n/a	mg/L	No	0.03	0.11	0.07	47	No	0.04	0.10	0.07	4	No	0.03	0.07	0.05	8
Chloroform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	2.95	ND	197	No	ND	0.56	ND	22	No	ND	0.29	ND	10
Dibromoacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	0.65	ND	12	No	ND	0.77	ND	6	No	NA	NA	NA	0
Dibromochloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	2.67	ND	197	No	ND	1.05	ND	22	No	ND	ND	ND	10
Dichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	1.66	ND	12	No	ND	1.37	ND	6	No	NA	NA	NA	0
Free Chlorine	Used as a disinfectant	4	n/a	mg/L	No	0.30	1.55	0.99	705	No	0.31	1.45	1.01	170	No	0.75	1.42	1.02	60
Trichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	ND	ND	12	No	ND	ND	ND	6	No	NA	NA	NA	0
(*MCL is the sum of the starred compounds shown above)																			

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 9					Distribution Area 10					Distribution Area 11				
					Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests
Disinfectant and Disinfection Byproducts (MCL is the sum of the four starred compounds shown below)**																			
Bromochloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	10	No	ND	ND	ND	6
Bromodichloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	10	No	ND	ND	ND	6
Bromodichloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	1.02	ND	77	No	ND	0.63	ND	122	No	ND	1.22	ND	190
Bromoform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	0.75	ND	77	No	ND	1.59	ND	122	No	ND	0.87	ND	190
Chlorate	Byproduct of chlorination	n/a	n/a	mg/L	No	0.04	0.26	0.09	18	No	0.04	0.17	0.08	40	No	0.04	0.18	0.08	42
Chloroform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	2.22	0.35	77	No	ND	0.98	0.37	122	No	ND	1.15	0.25	190
Dibromoacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	10	No	ND	ND	ND	6
Dibromochloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	1.08	ND	77	No	ND	0.80	ND	122	No	ND	1.21	ND	190
Dichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	10	No	ND	ND	ND	6
Free Chlorine	Used as a disinfectant	4	n/a	mg/L	No	0.44	1.37	0.96	340	No	0.29	1.58	0.95	698	No	0.35	1.50	1.03	535
Trichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	10	No	ND	ND	ND	6
(*MCL is the sum of the starred compounds shown above)																			

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 12					Distribution Area 14					Distribution Area 15				
					Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	Range of Readings High Value	Range of Readings Avg. Value	No. of Tests
Disinfectant and Disinfection Byproducts (MCL is the sum of the four starred compounds shown below)**																			
Bromochloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	1.89	ND	40	No	ND	ND	ND	4	No	ND	ND	ND	12
Bromodichloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	ND	ND	40	No	ND	ND	ND	4	No	ND	ND	ND	12
Bromodichloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	9.20	0.25	556	No	ND	0.75	ND	23	No	ND	4.30	ND	351
Bromoform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	2.35	ND	556	No	ND	ND	ND	23	No	ND	0.89	ND	351
Chlorate	Byproduct of chlorination	n/a	n/a	mg/L	No	ND	0.75	0.11	300	No	0.05	0.16	0.07	14	No	0.03	0.70	0.14	209
Chloroform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	9.35	0.46	556	No	ND	1.10	0.36	23	No	ND	5.58	0.49	351
Dibromoacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	1.06	ND	40	No	ND	ND	ND	4	No	ND	ND	ND	12
Dibromochloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	6.55	ND	556	No	ND	0.61	ND	23	No	ND	2.55	ND	351
Dichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	2.50	ND	40	No	ND	ND	ND	4	No	ND	ND	ND	12
Free Chlorine	Used as a disinfectant	4	n/a	mg/L	No	0.33	1.60	0.96	2751	No	0.25	1.50	0.94	263	No	0.27	1.81	0.99	2,022
Trichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	0.69	ND	40	No	ND	ND	ND	4	No	ND	ND	ND	12
(*MCL is the sum of the starred compounds shown above)																			

WATER QUALITY DATA BY DISTRIBUTION AREA

Disinfectants and Disinfection Byproducts (cont'd)

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 23					Distribution Area 26					Distribution Area 30				
					Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Disinfectant and Disinfection Byproducts (MCL is the sum of the four starred compounds shown below)**																			
Bromochloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	ND	ND	12	No	ND	1.04	ND	4	No	ND	2.02	0.87	10
Bromodichloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	ND	ND	12	No	ND	ND	ND	4	No	ND	ND	ND	10
Bromodichloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	2.70	ND	210	No	ND	3.40	0.44	55	No	ND	4.61	0.27	184
Bromoform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	1.51	ND	210	No	ND	3.00	0.34	55	No	ND	3.41	0.30	184
Chlorate	Byproduct of chlorination	n/a	n/a	mg/L	No	0.03	0.37	0.13	129	No	0.09	0.26	0.16	33	No	ND	0.52	0.12	118
Chloroform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	4.19	1.15	210	No	0.31	4.03	1.03	55	No	ND	3.10	0.45	184
Dibromoacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	0.46	ND	12	No	0.54	1.26	0.84	4	No	0.60	2.38	1.25	10
Dibromochloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	2.65	ND	210	No	ND	4.95	0.54	55	No	ND	5.47	0.37	184
Dichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	ND	ND	12	No	ND	ND	ND	4	No	ND	1.73	ND	10
Free Chlorine	Used as a disinfectant	4	n/a	mg/L	No	0.27	1.60	0.95	1,227	No	0.37	1.50	0.88	253	No	0.20	1.55	0.95	863
Trichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	ND	ND	12	No	ND	ND	ND	4	No	ND	1.00	ND	10
(*MCL is the sum of the starred compounds shown above)																			

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 32					Distribution Area 34					Distribution Area 35				
					Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Disinfectant and Disinfection Byproducts (MCL is the sum of the four starred compounds shown below)**																			
Bromochloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	NA	NA	NA	0
Bromodichloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	NA	NA	NA	0
Bromodichloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	1.10	0.30	9	No	ND	1.01	ND	10	No	ND	ND	ND	31
Bromoform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	0.35	ND	9	No	ND	0.33	ND	10	No	ND	0.25	ND	31
Chlorate	Byproduct of chlorination	n/a	n/a	mg/L	No	0.11	0.32	0.20	6	No	0.05	0.11	0.08	6	No	0.07	0.30	0.14	10
Chloroform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	4.53	2.72	9	No	0.37	2.38	1.77	10	No	ND	0.36	ND	31
Dibromoacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	NA	NA	NA	0
Dibromochloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	1.03	0.29	9	No	ND	1.02	0.25	10	No	ND	0.28	ND	31
Dichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	NA	NA	NA	0
Free Chlorine	Used as a disinfectant	4	n/a	mg/L	No	0.62	1.64	0.98	63	No	0.50	1.48	1.01	107	No	0.39	1.70	1.08	94
Trichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	NA	NA	NA	0	No	NA	NA	NA	0	No	NA	NA	NA	0
(*MCL is the sum of the starred compounds shown above)																			

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 44					Distribution Area 53					Distribution Area 54				
					Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Disinfectant and Disinfection Byproducts (MCL is the sum of the four starred compounds shown below)**																			
Bromochloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	NA	NA	NA	0	No	ND	0.85	ND	8	No	ND	ND	ND	4
Bromodichloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	NA	NA	NA	0	No	ND	1.60	ND	8	No	ND	ND	ND	4
Bromodichloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	2.10	0.61	10	No	ND	2.48	0.62	28	No	ND	1.80	0.37	35
Bromoform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	0.83	0.33	10	No	ND	ND	ND	28	No	ND	ND	ND	35
Chlorate	Byproduct of chlorination	n/a	n/a	mg/L	No	0.09	0.21	0.14	6	No	ND	0.18	0.06	28	No	ND	0.68	0.12	47
Chloroform	Byproduct of chlorination	**80	n/a	ug/L	No	1.00	2.90	2.00	10	No	ND	11.81	1.46	28	No	ND	6.86	0.91	35
Dibromoacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	8	No	ND	ND	ND	4
Dibromochloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	2.04	0.63	10	No	ND	0.66	0.26	28	No	ND	0.53	ND	35
Dichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	NA	NA	NA	0	No	ND	6.10	1.69	8	No	ND	ND	ND	4
Free Chlorine	Used as a disinfectant	4	n/a	mg/L	No	0.44	1.38	0.86	56	No	0.59	1.63	1.08	80	No	0.26	1.80	1.09	142
Trichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	NA	NA	NA	0	No	ND	10.55	2.43	8	No	ND	0.77	0.41	4
(*MCL is the sum of the starred compounds shown above)																			

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 57					Distribution Area 64					Distribution Area EFWD				
					Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Disinfectant and Disinfection Byproducts (MCL is the sum of the four starred compounds shown below)**																			
Bromochloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	12
Bromodichloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	12
Bromodichloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	1.84	0.41	10	No	ND	1.97	0.57	20	No	ND	1.80	0.57	21
Bromoform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	0.92	0.27	10	No	ND	1.16	0.37	20	No	ND	0.65	ND	21
Chlorate	Byproduct of chlorination	n/a	n/a	mg/L	No	0.09	0.23	0.15	6	No	0.12	0.24	0.16	12	No	0.04	0.24	0.11	14
Chloroform	Byproduct of chlorination	**80	n/a	ug/L	No	0.26	3.10	1.83	10	No	1.08	3.59	2.35	20	No	ND	2.21	0.93	21
Dibromoacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	NA	NA	NA	0	No	ND	0.78	0.44	6	No	ND	ND	ND	12
Dibromochloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	2.03	0.46	10	No	ND	2.29	0.70	20	No	ND	1.21	0.41	21
Dichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	12
Free Chlorine	Used as a disinfectant	4	n/a	mg/L	No	0.40	1.33	0.77	56	No	0.65	1.36	0.98	35	No	0.39	1.52	0.91	164
Trichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	NA	NA	NA	0	No	ND	ND	ND	6	No	ND	ND	ND	12
(*MCL is the sum of the starred compounds shown above)																			

Disinfectants and Disinfection Byproducts (cont'd)

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area RSWD					Distribution Area SBWD					Distribution Area WNWD				
					Range of Readings					Range of Readings					Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Disinfectant and Disinfection Byproducts (MCL is the sum of the four starred compounds shown below)**																			
Bromochloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	1
Bromodichloroacetic Acid	Byproduct of chlorination	50	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	1
Bromodichloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	0.69	0.35	10	No	ND	0.67	0.27	12	No	ND	0.38	ND	19
Bromoform	Byproduct of chlorination	**80	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	0.26	ND	19
Chlorate	Byproduct of chlorination	n/a	n/a	mg/L	No	0.05	0.09	0.07	10	No	0.04	0.09	0.07	12	No	0.06	0.34	0.17	9
Chloroform	Byproduct of chlorination	**80	n/a	ug/L	No	0.69	1.60	0.97	10	No	ND	0.80	0.42	12	No	ND	5.07	1.31	19
Dibromoacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	1
Dibromochloromethane	Byproduct of chlorination	**80	n/a	ug/L	No	ND	0.52	0.25	10	No	ND	0.55	ND	12	No	ND	0.61	ND	19
Dichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	1
Free Chlorine	Used as a disinfectant	4	n/a	mg/L	No	0.29	1.32	0.85	56	No	0.39	1.50	0.96	104	No	0.80	1.60	1.12	24
Trichloroacetic Acid	Byproduct of chlorination	*60	n/a	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	8	No	ND	ND	ND	1
(*MCL is the sum of the starred compounds shown above)																			

Lead

Elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. SCWA is responsible for providing high quality drinking water, but is not responsible for the variety of materials used in a homeowner's plumbing. If you haven't run your water for several hours, you can minimize the potential for lead exposure by running your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. To schedule a lead test, please contact our Customer Contact Center (contact information listed on back page). Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at www.epa.gov/safewater/lead. Additional information at https://www.scwa.com/leadandcopper/

Lead and Copper Rule (LCR) Monitoring

This EPA regulation requires public water systems to monitor drinking water at specific customers' taps every three years. To check the effectiveness of our pH treatment and to ensure the quality of our drinking water the SCWA performs this testing every year. If lead levels exceed 15 parts per billion (ppb) or copper levels exceed 1.3 parts per million (ppm) in more than 10% of these samples, we must improve our corrosion control (pH treatment). Based on our 2023 LCR results, we have optimal corrosion control. Additional information on our pH treatment can be found on page 43.

2023 Lead and Copper Test Results

The values reported below for lead and copper represent the 90th percentile of the total number of samples collected in each water system. A percentile is a value on a scale of 100 that indicates the percentage of a distribution that is equal to or below it. For Dering Harbor and West Neck Water Districts (Distribution Area 64 and 66), the 90th percentile is found by averaging the two highest concentrations.

Compound	Unit of Measure	MCLG	Action Level	Likely Source
Lead	ug/l	0	15.0	Household plumbing

Location	Violation Yes/No	Date of Sampling	Number of Samples	Results ug/l	90th Percentile Value (ug/l)[1,2]	No. of Samples Over Action Level
SCWA	No	8/08-9/24	52	ND-5.36	1.27	0
Fire Island	No	7/06-8/20	20	ND-4.64	3.41	0
Stony Brook	No	7/24-9/18	21	ND-1.67	ND	0
Riverside	No	8/15-8/21	12	ND-3.17	1.06	0
E. Farmingdale	No	8/23-9/07	21	ND-7.99	1.2	0
Dering Harbor	No	8/09-9/01	5	ND-1.49	ND	0
West Neck	No	8/10-9/27	7	ND-1.46	1.32	0

(1) - The 90th percentile value is equal to or greater than 90% of the lead values detected in the water system.

(2) - In this case, 138 total samples were collected from the water systems shown above and the 90th percentile values ranged from ND to 3.41 ug/l for lead. The action level value for lead was not exceeded at any of the 138 sites tested.

Compound	Unit of Measure	MCLG	Action Level	Likely Source
Copper	mg/l	1.3	1.3	Household plumbing

Location	Violation Yes/No	Date of Sampling	Number of Samples	Results mg/l	90th Percentile Value (mg/l)[1,2]	No. of Samples Over Action Level
SCWA	No	8/08-9/24	52	ND-0.583	0.349	0
Fire Island	No	7/06-8/20	20	ND-0.674	0.567	0
Stony Brook	No	7/24-9/18	21	0.0560-0.555	0.36	0
Riverside	No	8/15-8/21	12	0.0584-0.437	0.397	0
E. Farmingdale	No	8/23-9/07	21	ND-0.221	0.175	0
Dering Harbor	No	8/09-9/01	5	0.0393-0.213	0.178	0
West Neck	No	8/10-9/27	7	0.0705-1.13	0.879	0

(1) - The 90th percentile value is equal to or greater than 90% of the copper values detected in the water system.

(2) - In this case, 138 total samples were collected from the water systems shown above and the 90th percentile values ranged from 0.175 to 0.879 mg/l for copper. The action level value for copper was not exceeded at any of the 138 sites tested.

A97

WATER QUALITY DATA BY DISTRIBUTION AREA

Naturally Occuring Compounds as well as Contaminants

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 1					Distribution Area 4					Distribution Area 5				
					Range of Readings					Range of Readings					Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Inorganics																			
Alkalinity to pH 4.5 mg CaCO3/L	Naturally occurring	n/a	n/a	mg/L	No	ND	118.4	36.9	330	No	32.0	46.6	39.1	8	No	34.6	90.0	49.3	10
Aluminum	Naturally occurring	n/a	n/a	mg/L	No	ND	0.30	0.03	637	No	0.02	0.09	0.06	8	No	ND	0.10	0.04	22
Ammonia, free	Some fertilizers, septic systems	n/a	n/a	mg/L	No	ND	0.14	ND	198	No	ND	ND	ND	4	No	ND	ND	ND	5
Arsenic	Erosion of natural deposits	10	0	ug/L	No	ND	2.7	ND	637	No	ND	ND	ND	8	No	ND	ND	ND	22
Barium	Erosion of natural deposits	2	2	mg/L	No	ND	0.09	ND	637	No	ND	ND	ND	8	No	ND	0.20	0.08	22
Boron	Naturally occurring	n/a	n/a	mg/L	No	ND	0.62	ND	1013	No	ND	0.11	ND	38	No	ND	ND	ND	12
Bromide	Naturally occurring	n/a	n/a	ug/L	No	ND	122.7	ND	362	No	ND	ND	ND	8	No	ND	75.9	ND	10
Calcium	Naturally occurring, pH control	n/a	n/a	mg/L	No	ND	59.3	12.1	1013	No	ND	0.9	0.5	38	No	11.3	52.1	25.7	12
Chloride	Naturally occurring,salt water intrusion,road salt	250	n/a	mg/L	No	3.8	133.4	19.5	373	No	2.9	4.3	3.6	8	No	11.9	157.9	79.4	39
Chromium, total	Natural deposits	100	100	ug/L	No	ND	1.2	ND	637	No	ND	0.5	ND	8	No	ND	2.5	1.0	22
CO2, calculated	Naturally occurring	n/a	n/a	mg/L	No	0.1	24.1	5.1	330	No	2.4	8.0	5.1	8	No	3.3	18.8	10.7	10
Cobalt-59	Naturally occurring	n/a	n/a	ug/L	No	ND	4.8	ND	637	No	ND	ND	ND	8	No	ND	ND	ND	22
Color, Apparent	Naturally occurring metals or minerals	15	n/a	Color Units	No	ND	15	ND	330	No	ND	7	ND	8	No	ND	ND	ND	10
Copper	Household plumbing	AL=1.3	1.3	mg/L	No	ND	0.19	ND	637	No	ND	0.02	ND	8	No	ND	0.20	0.06	22
Fluoride	Erosion of natural deposits	2.2	n/a	mg/L	No	ND	0.5	ND	373	No	ND	ND	ND	8	No	ND	ND	ND	39
Hardness, total	Measure of the calcium and magnesium	n/a	n/a	mg/L	No	2.2	181.0	36.4	1013	No	ND	2.6	ND	38	No	46.2	179.3	95.1	12
Hexavalent Chromium	Erosion of natural deposits	n/a	n/a	ug/L	No	ND	0.89	0.15	332	No	ND	0.18	ND	8	No	0.11	2.58	1.26	14
Iron	Naturally occurring	300	n/a	ug/L	Yes	ND	885	219	1013	Yes	193	421	295	38	No	ND	68	ND	12
Lithium	Naturally occurring	n/a	n/a	ug/L	No	ND	9.1	2.1	637	No	3.6	4.2	4.0	8	No	ND	2.0	ND	22
Magnesium	Naturally occurring	n/a	n/a	mg/L	No	0.19	9.35	1.49	1013	No	ND	ND	ND	38	No	4.38	11.96	7.54	12
Manganese	Naturally occurring	300	n/a	ug/L	No	ND	108	10	1013	No	ND	ND	ND	38	No	ND	ND	ND	12
Nickel	Alloys, coatings manufacturing, batteries	100	n/a	ug/L	No	ND	8.0	1.0	637	No	ND	ND	ND	8	No	ND	1.8	0.7	22
Nitrate	Natural deposits, fertilizer, septic tanks	10	10	mg/L	No	ND	4.56	0.54	372	No	ND	0.02	ND	8	No	3.59	8.19	5.55	39
Nitrite	Natural deposits, fertilizer, septic tanks	1	1	mg/L	No	ND	ND	ND	373	No	ND	ND	ND	8	No	ND	ND	ND	39
Perchlorate	Fertilizers, solid fuel propellant, fireworks	15	5	ug/L	No	ND	1.71	ND	367	No	ND	ND	ND	10	No	ND	1.88	0.60	12
pH	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.5	8.8	7.4	632	No	6.9	7.5	7.2	8	No	6.6	8.1	7.2	21
pH, field	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.6	8.5	7.5	3874	No	7.0	7.9	7.3	42	No	6.9	8.0	7.3	155
Phosphate, total	Added to keep iron in solution	n/a	n/a	mg/L	No	ND	3.56	0.68	1013	No	0.27	3.70	1.88	38	No	ND	ND	ND	12
Potassium	Naturally occurring	n/a	n/a	mg/L	No	0.23	5.70	0.64	1013	No	1.19	1.52	1.30	38	No	0.92	2.25	1.47	12
Silicon	Naturally occurring	n/a	n/a	mg/L	No	2.9	8.6	4.9	637	No	4.2	4.4	4.3	8	No	6.8	7.8	7.2	22
Sodium	Naturally occurring	n/a	n/a	mg/L	No	2.5	64.4	7.4	1013	No	18.5	34.9	23.0	38	No	8.5	72.4	29.7	12
Specific Conductance	Total of naturally occurring minerals	n/a	n/a	umho/cm	No	47	541	129	330	No	96	142	116	8	No	150	756	299	10
Strontium-88	Naturally occurring	n/a	n/a	mg/L	No	ND	0.191	0.036	637	No	ND	ND	ND	8	No	0.037	0.151	0.083	22
Sulfate	Naturally occurring	250	n/a	mg/L	No	ND	53.4	6.4	373	No	7.5	8.7	8.0	8	No	5.9	19.8	13.7	39
Titanium	Naturally occurring	n/a	n/a	ug/L	No	ND	9.1	ND	1013	No	ND	ND	ND	38	No	ND	ND	ND	12
Total Organic Carbon (TOC)	Naturally occurring	n/a	n/a	mg/L	No	ND	0.6	ND	32	No	0.9	0.9	0.9	2	No	ND	ND	ND	2
Turbidity	Silts and clays in aquifer	5	n/a	NTU	No	ND	2.95	0.42	330	No	ND	ND	ND	8	No	ND	0.93	ND	10
Uranium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	637	No	ND	ND	ND	8	No	ND	ND	ND	22
Vanadium	Naturally occurring	n/a	n/a	ug/L	No	ND	1.1	ND	637	No	ND	ND	ND	8	No	ND	ND	ND	22
Zinc	Naturally occurring, plumbing	5	n/a	mg/L	No	ND	0.07	ND	637	No	ND	ND	ND	8	No	ND	0.04	ND	22
Synthetic Organic Compounds including Pesticides and Herbicides (August 26, 2020 NYS adopts an MCL of 1 ppb for 1,4 Dioxane, see page 34)																			
Alachlor ESA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	334	No	ND	ND	ND	8	No	ND	ND	ND	12
Alachlor OA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	334	No	ND	ND	ND	8	No	ND	ND	ND	12
Aldicarb Sulfone	Pesticide used on row crops	2	1	ug/L	No	ND	ND	ND	328	No	ND	ND	ND	8	No	ND	ND	ND	10
Aldicarb Sulfoxide	Pesticide used on row crops	4	1	ug/L	No	ND	ND	ND	328	No	ND	ND	ND	8	No	ND	ND	ND	10
Chlordane, Total	Residue of banned termiticide	2	n/a	ug/L	No	ND	ND	ND	328	No	ND	ND	ND	8	No	ND	ND	ND	10
Diethyltoluamide (DEET)	Insect Repellent	50	n/a	ug/L	No	ND	0.27	ND	331	No	ND	ND	ND	8	No	ND	ND	ND	10
1,4-Dioxane	Used in manufacturing processes	*1	n/a	ug/L	No	ND	0.64	0.09	379	No	ND	ND	ND	8	No	ND	0.97	0.43	22
Metalaxyl	Used as a fungicide	50	n/a	ug/L	No	ND	ND	ND	331	No	ND	ND	ND	8	No	ND	ND	ND	10
Metolachlor ESA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	334	No	ND	ND	ND	8	No	ND	ND	ND	12
Metolachlor OA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	334	No	ND	ND	ND	8	No	ND	ND	ND	12
Tetrachloroterephthalic Acid	Used as a herbicide	50	n/a	ug/L	No	ND	1.53	ND	330	No	ND	ND	ND	8	No	ND	ND	ND	12
Volatile Organic Compounds																			
Chlorobenzene	From industrial chemical factories	5	n/a	ug/L	No	ND	0.18	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
Chlorodifluoromethane	Used as a refrigerant	5	n/a	ug/L	No	ND	ND	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
Cis-1,2-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	471	No	ND	ND	ND	8	No	ND	0.31	ND	61
1,3-Dichlorobenzene	Used as a fumigant and insecticide	5	n/a	ug/L	No	ND	0.15	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
Dichlorodifluoromethane	Refrigerant, aerosol propellant	5	n/a	ug/L	No	ND	ND	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
1,1-Dichloroethane	Degreaser, gasoline, manufacturing	5	n/a	ug/L	No	ND	0.80	ND	471	No	ND	ND	ND	8	No	ND	0.61	0.27	61
1,1-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	0.29	ND	471	No	ND	ND	ND	8	No	ND	0.43	ND	61
1,2-Dichloropropane	From industrial chemical factories	5	0	ug/L	No	ND	ND	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
Ethyl Benzene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	0.13	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
4-Methyl-2-Pentanone	From manufacturing facilities	50	n/a	ug/L	No	ND	ND	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
Methyl-Tert-Butyl Ether	Gasoline	10	n/a	ug/L	No	ND	0.44	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
o-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	0.60	ND	471	No	ND	ND	ND	8	No	ND	0.24	ND	61
p,m-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	0.58	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
Tetrachloroethene	Factories, dry cleaners, spills	5	0	ug/L	No	ND	0.32	ND	471	No	ND	ND	ND	8	No	ND	0.27	ND	61
Toluene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	0.31	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
1,2,4-Trichlorobenzene	Discharge from textile-finishing factories	5	n/a	ug/L	No	ND	0.35	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
1,1,1-Trichloroethane	Metal degreasing sites, factories	5	n/a	ug/L	No	ND	ND	ND	471	No	ND	ND	ND	8	No	ND	0.36	ND	61
Trichloroethene	Metal degreasing sites, factories	5	0	ug/L	No	ND	0.34	ND	471	No	ND	ND	ND	8	No	ND	0.85	ND	61
Trichlorofluoromethane	Dry cleaning,propellant,fire extinguishers	5	n/a	ug/L	No	ND	ND	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
1,2,3-Trichloropropane	Degreasing agent, manufacturing	5	n/a	ug/L	No	ND	0.85	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61
1,1,2-Trichlorotrifluoroethane	Solvent in paints and varnishes	5	n/a	ug/L	No	ND	ND	ND	471	No	ND	ND	ND	8	No	ND	ND	ND	61

A98

WATER QUALITY DATA BY DISTRIBUTION AREA

Naturally Occuring Compounds as well as Contaminants

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 6					Distribution Area 7					Distribution Area 8				
					Range of Readings					Range of Readings					Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Inorganics																			
Alkalinity to pH 4.5 mg CaCO3/L	Naturally occurring	n/a	n/a	mg/L	No	ND	85.8	53.3	43	No	50.0	68.2	60.1	4	No	28.4	33.8	31.0	8
Aluminum	Naturally occurring	n/a	n/a	mg/L	No	ND	0.05	0.03	50	No	ND	0.04	0.02	5	No	ND	0.02	ND	8
Ammonia, free	Some fertilizers, septic systems	n/a	n/a	mg/L	No	ND	ND	ND	22	No	ND	ND	ND	2	No	ND	ND	ND	4
Arsenic	Erosion of natural deposits	10	0	ug/L	No	ND	ND	ND	50	No	ND	ND	ND	5	No	ND	ND	ND	8
Barium	Erosion of natural deposits	2	2	mg/L	No	ND	0.06	ND	50	No	ND	0.03	0.02	5	No	ND	ND	ND	8
Boron	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	43	No	ND	ND	ND	4	No	ND	ND	ND	8
Bromide	Naturally occurring	n/a	n/a	ug/L	No	ND	74.6	ND	47	No	ND	59.2	ND	4	No	ND	ND	ND	8
Calcium	Naturally occurring, pH control	n/a	n/a	mg/L	No	6.8	37.3	23.3	43	No	12.1	30.0	21.6	4	No	9.7	16.8	13.0	8
Chloride	Naturally occurring,salt water intrusion,road salt	250	n/a	mg/L	No	7.5	30.1	21.1	195	No	14.0	23.9	22.1	25	No	6.8	18.6	11.9	8
Chromium, total	Natural deposits	100	100	ug/L	No	ND	12.0	0.7	50	No	ND	ND	ND	5	No	ND	ND	ND	8
CO2, calculated	Naturally occurring	n/a	n/a	mg/L	No	0.3	26.7	8.3	43	No	5.6	14.5	9.8	4	No	3.6	12.6	7.0	8
Cobalt-59	Naturally occurring	n/a	n/a	ug/L	No	ND	0.8	ND	50	No	ND	ND	ND	5	No	ND	ND	ND	8
Color, Apparent	Naturally occurring metals or minerals	15	n/a	Color Units	No	ND	5	ND	43	No	ND	ND	ND	4	No	ND	5	ND	8
Copper	Household plumbing	AL=1.3	1.3	mg/L	No	ND	0.06	ND	50	No	ND	0.06	ND	5	No	ND	ND	ND	8
Fluoride	Erosion of natural deposits	2.2	n/a	mg/L	No	ND	ND	ND	195	No	ND	ND	ND	25	No	ND	ND	ND	8
Hardness, total	Measure of the calcium and magnesium	n/a	n/a	mg/L	No	25.4	126.9	77.5	43	No	46.3	99.2	74.4	4	No	27.7	54.1	40.1	8
Hexavalent Chromium	Erosion of natural deposits	n/a	n/a	ug/L	No	ND	0.88	0.30	49	No	ND	0.16	ND	5	No	ND	0.28	0.18	8
Iron	Naturally occurring	300	n/a	ug/L	No	ND	31	ND	43	No	ND	ND	ND	4	No	ND	ND	ND	8
Lithium	Naturally occurring	n/a	n/a	ug/L	No	ND	2.0	ND	50	No	ND	ND	ND	5	No	ND	ND	ND	8
Magnesium	Naturally occurring	n/a	n/a	mg/L	No	1.60	8.20	4.66	43	No	3.88	5.89	4.99	4	No	0.85	2.96	1.85	8
Manganese	Naturally occurring	300	n/a	ug/L	No	ND	ND	ND	43	No	ND	ND	ND	4	No	ND	ND	ND	8
Nickel	Alloys, coatings manufacturing, batteries	100	n/a	ug/L	No	ND	1.7	0.6	50	No	ND	0.9	0.6	5	No	0.6	6.5	1.6	8
Nitrate	Natural deposits, fertilizer, septic tanks	10	10	mg/L	No	0.20	8.28	6.09	194	No	0.06	8.17	6.04	25	No	1.46	4.00	2.66	8
Nitrite	Natural deposits, fertilizer, septic tanks	1	1	mg/L	No	ND	ND	ND	195	No	ND	ND	ND	25	No	ND	ND	ND	8
Perchlorate	Fertilizers, solid fuel propellant, fireworks	15	5	ug/L	No	ND	3.31	1.06	59	No	ND	ND	ND	6	No	0.75	2.04	1.28	10
pH	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.6	8.7	7.3	92	No	6.9	8.1	7.3	16	No	6.7	7.2	7.0	8
pH, field	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.8	9.0	7.4	701	No	7.0	8.4	7.2	170	No	7.0	7.7	7.3	60
Phosphate, total	Added to keep iron in solution	n/a	n/a	mg/L	No	ND	ND	ND	43	No	ND	0.29	ND	4	No	ND	ND	ND	8
Potassium	Naturally occurring	n/a	n/a	mg/L	No	0.58	1.50	1.06	43	No	1.03	1.31	1.15	4	No	0.55	0.97	0.74	8
Silicon	Naturally occurring	n/a	n/a	mg/L	No	4.8	9.0	7.0	50	No	6.8	8.6	7.6	5	No	3.7	4.1	3.9	8
Sodium	Naturally occurring	n/a	n/a	mg/L	No	6.1	16.4	10.9	43	No	10.0	16.1	13.1	4	No	5.2	10.4	7.6	8
Specific Conductance	Total of naturally occurring minerals	n/a	n/a	umho/cm	No	90	345	224	43	No	145	291	225	4	No	85	191	130	8
Strontium-88	Naturally occurring	n/a	n/a	mg/L	No	0.024	0.121	0.075	50	No	0.065	0.097	0.087	5	No	0.018	0.053	0.034	8
Sulfate	Naturally occurring	250	n/a	mg/L	No	ND	25.2	12.2	195	No	ND	13.2	10.2	25	No	ND	8.8	4.3	8
Titanium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	43	No	ND	ND	ND	4	No	ND	ND	ND	8
Total Organic Carbon (TOC)	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	4	No	ND	ND	ND	2	No	ND	ND	ND	2
Turbidity	Silts and clays in aquifer	5	n/a	NTU	No	ND	1.82	0.43	43	No	ND	0.78	0.47	4	No	ND	0.67	0.45	8
Uranium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	50	No	ND	ND	ND	5	No	ND	ND	ND	8
Vanadium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	50	No	ND	ND	ND	5	No	ND	ND	ND	8
Zinc	Naturally occurring, plumbing	5	n/a	mg/L	No	ND	ND	ND	50	No	ND	ND	ND	5	No	ND	0.03	ND	8
Synthetic Organic Compounds including Pesticides and Herbicides (August 26, 2020 NYS adopts an MCL of 1 ppb for 1,4 Dioxane, see page 34)																			
Alachlor ESA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	48	No	ND	ND	ND	4	No	ND	ND	ND	8
Alachlor OA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	48	No	ND	ND	ND	4	No	ND	ND	ND	8
Aldicarb Sulfone	Pesticide used on row crops	2	1	ug/L	No	ND	ND	ND	52	No	ND	ND	ND	4	No	ND	ND	ND	8
Aldicarb Sulfoxide	Pesticide used on row crops	4	1	ug/L	No	ND	ND	ND	52	No	ND	ND	ND	4	No	ND	ND	ND	8
Chlordane, Total	Residue of banned termiticide	2	n/a	ug/L	No	ND	ND	ND	43	No	ND	ND	ND	4	No	ND	ND	ND	8
Diethyltoluamide (DEET)	Insect Repellent	50	n/a	ug/L	No	ND	ND	ND	46	No	ND	ND	ND	4	No	ND	ND	ND	8
1,4-Dioxane	Used in manufacturing processes	*1	n/a	ug/L	No	ND	2.59	0.54	88	No	ND	1.57	0.35	10	No	ND	0.19	0.11	14
Metalaxyl	Used as a fungicide	50	n/a	ug/L	No	ND	ND	ND	46	No	ND	ND	ND	4	No	ND	ND	ND	8
Metolachlor ESA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	48	No	ND	ND	ND	4	No	ND	ND	ND	8
Metolachlor OA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	48	No	ND	ND	ND	4	No	ND	ND	ND	8
Tetrachloroterephthalic Acid	Used as a herbicide	50	n/a	ug/L	No	ND	5.00	1.26	59	No	ND	ND	ND	4	No	ND	ND	ND	8
Volatile Organic Compounds																			
Chlorobenzene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
Chlorodifluoromethane	Used as a refrigerant	5	n/a	ug/L	No	ND	ND	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
Cis-1,2-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	1.07	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
1,3-Dichlorobenzene	Used as a fumigant and insecticide	5	n/a	ug/L	No	ND	ND	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
Dichlorodifluoromethane	Refrigerant, aerosol propellant	5	n/a	ug/L	No	ND	ND	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
1,1-Dichloroethane	Degreaser, gasoline, manufacturing	5	n/a	ug/L	No	ND	1.86	0.45	197	No	ND	0.43	ND	22	No	ND	ND	ND	10
1,1-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	0.37	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
1,2-Dichloropropane	From industrial chemical factories	5	0	ug/L	No	ND	0.53	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
Ethyl Benzene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
4-Methyl-2-Pentanone	From manufacturing facilities	50	n/a	ug/L	No	ND	ND	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
Methyl-Tert-Butyl Ether	Gasoline	10	n/a	ug/L	No	ND	ND	ND	197	No	ND	ND	ND	22	No	ND	0.34	ND	10
o-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	197	No	ND	0.16	ND	22	No	ND	ND	ND	10
p,m-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	197	No	ND	0.28	ND	22	No	ND	ND	ND	10
Tetrachloroethene	Factories, dry cleaners, spills	5	0	ug/L	No	ND	2.04	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
Toluene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
1,2,4-Trichlorobenzene	Discharge from textile-finishing factories	5	n/a	ug/L	No	ND	ND	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
1,1,1-Trichloroethane	Metal degreasing sites, factories	5	n/a	ug/L	No	ND	0.40	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
Trichloroethene	Metal degreasing sites, factories	5	0	ug/L	No	ND	1.88	ND	197	No	ND	0.38	ND	22	No	ND	0.30	ND	10
Trichlorofluoromethane	Dry cleaning,propellant,fire extinguishers	5	n/a	ug/L	No	ND	ND	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
1,2,3-Trichloropropane	Degreasing agent, manufacturing	5	n/a	ug/L	No	ND	ND	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10
1,1,2-Trichlorotrifluoroethane	Solvent in paints and varnishes	5	n/a	ug/L	No	ND	0.27	ND	197	No	ND	ND	ND	22	No	ND	ND	ND	10

A99

WATER QUALITY DATA BY DISTRIBUTION AREA

Naturally Occuring Compounds as well as Contaminants

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 9					Distribution Area 10					Distribution Area 11				
					Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Range of Readings Low Value	High Value	Avg. Value	No. of Tests
Inorganics																			
Alkalinity to pH 4.5 mg CaCO3/L	Naturally occurring	n/a	n/a	mg/L	No	36.4	89.0	61.2	18	No	31.0	62.0	45.5	36	No	26.8	102.2	56.3	41
Aluminum	Naturally occurring	n/a	n/a	mg/L	No	ND	0.04	0.03	23	No	ND	0.05	0.03	40	No	ND	0.13	0.04	53
Ammonia, free	Some fertilizers, septic systems	n/a	n/a	mg/L	No	ND	ND	ND	8	No	ND	ND	ND	19	No	ND	ND	ND	21
Arsenic	Erosion of natural deposits	10	0	ug/L	No	ND	ND	ND	23	No	ND	ND	ND	40	No	ND	ND	ND	53
Barium	Erosion of natural deposits	2	2	mg/L	No	ND	0.03	ND	23	No	ND	0.06	ND	40	No	ND	0.07	0.03	53
Boron	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	18	No	ND	ND	ND	36	No	ND	ND	ND	51
Bromide	Naturally occurring	n/a	n/a	ug/L	No	ND	58.9	ND	18	No	ND	61.7	ND	40	No	ND	387.6	60.9	42
Calcium	Naturally occurring, pH control	n/a	n/a	mg/L	No	16.9	35.8	26.1	18	No	12.1	37.2	22.0	36	No	11.1	50.0	26.3	51
Chloride	Naturally occurring,salt water intrusion,road salt	250	n/a	mg/L	No	12.2	38.4	23.2	98	No	10.7	32.8	21.0	181	No	9.7	79.6	41.6	164
Chromium, total	Natural deposits	100	100	ug/L	No	ND	3.7	0.6	23	No	ND	4.1	0.8	40	No	ND	3.9	0.8	53
CO2, calculated	Naturally occurring	n/a	n/a	mg/L	No	2.8	9.7	5.5	18	No	0.4	28.0	7.5	36	No	1.8	32.8	8.7	41
Cobalt-59	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	23	No	ND	1.1	ND	40	No	ND	2.7	0.5	53
Color, Apparent	Naturally occurring metals or minerals	15	n/a	Color Units	No	ND	ND	ND	18	No	ND	5	ND	36	No	ND	5	ND	41
Copper	Household plumbing	AL=1.3	1.3	mg/L	No	ND	ND	ND	23	No	ND	0.03	ND	40	No	ND	0.04	ND	53
Fluoride	Erosion of natural deposits	2.2	n/a	mg/L	No	ND	ND	ND	98	No	ND	ND	ND	181	No	ND	ND	ND	164
Hardness, total	Measure of the calcium and magnesium	n/a	n/a	mg/L	No	58.3	126.0	89.0	18	No	42.7	119.8	72.7	36	No	35.4	153.7	83.8	51
Hexavalent Chromium	Erosion of natural deposits	n/a	n/a	ug/L	No	ND	2.98	0.53	23	No	ND	3.77	0.69	40	No	ND	3.68	0.72	45
Iron	Naturally occurring	300	n/a	ug/L	No	ND	30	ND	18	No	ND	35	ND	36	No	ND	88	ND	51
Lithium	Naturally occurring	n/a	n/a	ug/L	No	ND	2.7	ND	23	No	ND	ND	ND	40	No	ND	1.0	ND	53
Magnesium	Naturally occurring	n/a	n/a	mg/L	No	2.74	9.71	5.80	18	No	1.54	6.83	4.32	36	No	1.23	7.02	4.38	51
Manganese	Naturally occurring	300	n/a	ug/L	No	ND	ND	ND	18	No	ND	ND	ND	36	No	ND	76	18	51
Nickel	Alloys, coatings manufacturing, batteries	100	n/a	ug/L	No	ND	1.5	0.8	23	No	ND	2.1	1.1	40	No	ND	5.2	1.7	53
Nitrate	Natural deposits, fertilizer, septic tanks	10	10	mg/L	No	3.14	7.98	6.24	98	No	2.20	8.36	6.57	181	No	0.07	8.64	6.05	164
Nitrite	Natural deposits, fertilizer, septic tanks	1	1	mg/L	No	ND	ND	ND	98	No	ND	ND	ND	181	No	ND	ND	ND	164
Perchlorate	Fertilizers, solid fuel propellant, fireworks	15	5	ug/L	No	ND	0.91	0.50	21	No	ND	3.53	1.65	65	No	ND	1.79	0.67	47
pH	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	7.1	8.6	7.5	49	No	6.5	8.4	7.3	68	No	6.7	8.4	7.3	66
pH, field	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.9	8.5	7.4	338	No	6.7	9.0	7.3	694	No	6.4	8.5	7.3	535
Phosphate, total	Added to keep iron in solution	n/a	n/a	mg/L	No	ND	0.26	ND	18	No	ND	ND	ND	36	No	ND	ND	ND	51
Potassium	Naturally occurring	n/a	n/a	mg/L	No	0.81	1.87	1.23	18	No	0.81	1.53	1.09	36	No	0.69	2.15	1.30	51
Silicon	Naturally occurring	n/a	n/a	mg/L	No	4.8	9.9	6.6	23	No	3.4	8.3	5.5	40	No	3.8	7.1	5.3	53
Sodium	Naturally occurring	n/a	n/a	mg/L	No	9.1	20.7	15.2	18	No	8.2	18.9	12.1	36	No	6.4	36.3	19.8	51
Specific Conductance	Total of naturally occurring minerals	n/a	n/a	umho/cm	No	184	355	274	18	No	139	320	223	36	No	112	506	274	41
Strontium-88	Naturally occurring	n/a	n/a	mg/L	No	0.058	0.122	0.083	23	No	0.029	0.139	0.074	40	No	0.022	0.144	0.070	53
Sulfate	Naturally occurring	250	n/a	mg/L	No	3.4	27.6	13.3	98	No	ND	29.2	13.5	181	No	ND	17.3	8.7	164
Titanium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	18	No	ND	ND	ND	36	No	ND	ND	ND	51
Total Organic Carbon (TOC)	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	4	No	ND	ND	ND	4	No	ND	0.6	ND	4
Turbidity	Silts and clays in aquifer	5	n/a	NTU	No	ND	1.31	0.46	18	No	ND	1.56	0.42	36	No	ND	1.29	0.53	41
Uranium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	23	No	ND	ND	ND	40	No	ND	ND	ND	53
Vanadium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	23	No	ND	ND	ND	40	No	ND	ND	ND	53
Zinc	Naturally occurring, plumbing	5	n/a	mg/L	No	ND	ND	ND	23	No	ND	ND	ND	40	No	ND	0.02	ND	53
Synthetic Organic Compounds including Pesticides and Herbicides (August 26, 2020 NYS adopts an MCL of 1 ppb for 1,4 Dioxane, see page 34)																			
Alachlor ESA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	17	No	ND	ND	ND	37	No	ND	ND	ND	43
Alachlor OA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	17	No	ND	ND	ND	37	No	ND	ND	ND	43
Aldicarb Sulfone	Pesticide used on row crops	2	1	ug/L	No	ND	ND	ND	17	No	ND	ND	ND	37	No	ND	ND	ND	43
Aldicarb Sulfoxide	Pesticide used on row crops	4	1	ug/L	No	ND	ND	ND	17	No	ND	ND	ND	37	No	ND	ND	ND	43
Chlordane, Total	Residue of banned termiticide	2	n/a	ug/L	No	ND	ND	ND	17	No	ND	ND	ND	42	No	ND	ND	ND	63
Diethyltoluamide (DEET)	Insect Repellent	50	n/a	ug/L	No	ND	ND	ND	17	No	ND	ND	ND	38	No	ND	ND	ND	44
1,4-Dioxane	Used in manufacturing processes	*1	n/a	ug/L	No	ND	2.27	0.53	39	No	0.13	1.74	0.45	59	No	ND	1.67	0.48	77
Metalaxyl	Used as a fungicide	50	n/a	ug/L	No	ND	ND	ND	17	No	ND	ND	ND	38	No	ND	ND	ND	44
Metolachlor ESA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	17	No	ND	ND	ND	37	No	ND	ND	ND	43
Metolachlor OA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	17	No	ND	ND	ND	37	No	ND	ND	ND	43
Tetrachloroterephthalic Acid	Used as a herbicide	50	n/a	ug/L	No	ND	ND	ND	20	No	ND	ND	ND	39	No	ND	ND	ND	45
Volatile Organic Compounds																			
Chlorobenzene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	ND	ND	190
Chlorodifluoromethane	Used as a refrigerant	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	0.53	ND	190
Cis-1,2-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	0.84	ND	190
1,3-Dichlorobenzene	Used as a fumigant and insecticide	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	ND	ND	190
Dichlorodifluoromethane	Refrigerant, aerosol propellant	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	1.23	ND	190
1,1-Dichloroethane	Degreaser, gasoline, manufacturing	5	n/a	ug/L	No	ND	0.80	0.26	77	No	ND	1.55	0.43	122	No	ND	1.42	0.33	190
1,1-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	0.45	ND	77	No	ND	0.29	ND	122	No	ND	0.77	ND	190
1,2-Dichloropropane	From industrial chemical factories	5	0	ug/L	No	ND	ND	ND	77	No	ND	0.29	ND	122	No	ND	ND	ND	190
Ethyl Benzene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	ND	ND	190
4-Methyl-2-Pentanone	From manufacturing facilities	50	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	ND	ND	190
Methyl-Tert-Butyl Ether	Gasoline	10	n/a	ug/L	No	ND	0.25	ND	77	No	ND	0.59	ND	122	No	ND	1.31	ND	190
o-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	ND	ND	190
p,m-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	ND	ND	190
Tetrachloroethene	Factories, dry cleaners, spills	5	0	ug/L	No	ND	ND	ND	77	No	ND	0.34	ND	122	No	ND	0.58	ND	190
Toluene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	ND	ND	190
1,2,4-Trichlorobenzene	Discharge from textile-finishing factories	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	ND	ND	190
1,1,1-Trichloroethane	Metal degreasing sites, factories	5	n/a	ug/L	No	ND	0.54	ND	77	No	ND	0.32	ND	122	No	ND	0.69	ND	190
Trichloroethene	Metal degreasing sites, factories	5	0	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	0.60	ND	190
Trichlorofluoromethane	Dry cleaning,propellant,fire extinguishers	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	1.84	ND	190
1,2,3-Trichloropropane	Degreasing agent, manufacturing	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	0.27	ND	122	No	ND	ND	ND	190
1,1,2-Trichlorotrifluoroethane	Solvent in paints and varnishes	5	n/a	ug/L	No	ND	ND	ND	77	No	ND	ND	ND	122	No	ND	0.81	ND	190

A100

WATER QUALITY DATA BY DISTRIBUTION AREA

Naturally Occuring Compounds as well as Contaminants

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 12 Violation Yes/No	Distribution Area 12 Range of Readings Low Value	Distribution Area 12 Range of Readings High Value	Distribution Area 12 Range of Readings Avg. Value	Distribution Area 12 No. of Tests	Distribution Area 14 Violation Yes/No	Distribution Area 14 Range of Readings Low Value	Distribution Area 14 Range of Readings High Value	Distribution Area 14 Range of Readings Avg. Value	Distribution Area 14 No. of Tests	Distribution Area 15 Violation Yes/No	Distribution Area 15 Range of Readings Low Value	Distribution Area 15 Range of Readings High Value	Distribution Area 15 Range of Readings Avg. Value	Distribution Area 15 No. of Tests
Inorganics																			
Alkalinity to pH 4.5 mg CaCO3/L	Naturally occurring	n/a	n/a	mg/L	No	ND	147.4	57.2	249	No	ND	46.4	25.2	14	No	ND	118.2	51.4	167
Aluminum	Naturally occurring	n/a	n/a	mg/L	No	ND	0.28	0.03	478	No	ND	ND	ND	13	No	ND	0.16	0.04	204
Ammonia, free	Some fertilizers, septic systems	n/a	n/a	mg/L	No	ND	ND	ND	142	No	ND	ND	ND	7	No	ND	0.17	ND	87
Arsenic	Erosion of natural deposits	10	0	ug/L	No	ND	4.4	ND	478	No	ND	ND	ND	13	No	ND	1.5	ND	204
Barium	Erosion of natural deposits	2	2	mg/L	No	ND	0.09	ND	478	No	ND	0.03	ND	13	No	ND	0.13	0.03	204
Boron	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	485	No	ND	ND	ND	14	No	ND	ND	ND	239
Bromide	Naturally occurring	n/a	n/a	ug/L	No	ND	77.1	ND	300	No	ND	ND	ND	14	No	ND	57.6	ND	209
Calcium	Naturally occurring, pH control	n/a	n/a	mg/L	No	1.4	58.4	22.3	485	No	2.1	19.0	7.6	14	No	2.2	69.0	23.2	239
Chloride	Naturally occurring,salt water intrusion,road salt	250	n/a	mg/L	No	4.1	122.9	41.8	495	No	4.5	20.5	7.5	14	No	4.2	139.4	39.2	512
Chromium, total	Natural deposits	100	100	ug/L	No	ND	3.9	0.5	478	No	ND	1.0	ND	13	No	ND	4.4	1.0	204
CO2, calculated	Naturally occurring	n/a	n/a	mg/L	No	0.4	43.2	8.3	249	No	1.8	11.0	5.8	14	No	0.3	37.8	8.3	167
Cobalt-59	Naturally occurring	n/a	n/a	ug/L	No	ND	2.9	ND	478	No	ND	ND	ND	13	No	ND	1.5	ND	204
Color, Apparent	Naturally occurring metals or minerals	15	n/a	Color Units	No	ND	15	ND	249	No	ND	5	ND	14	No	ND	7	ND	167
Copper	Household plumbing	AL=1.3	1.3	mg/L	No	ND	0.12	ND	478	No	ND	0.08	0.03	13	No	ND	0.10	ND	204
Fluoride	Erosion of natural deposits	2.2	n/a	mg/L	No	ND	ND	ND	495	No	ND	ND	ND	14	No	ND	ND	ND	512
Hardness, total	Measure of the calcium and magnesium	n/a	n/a	mg/L	No	7.2	198.1	73.9	485	No	8.1	69.9	25.2	14	No	9.8	202.0	79.0	239
Hexavalent Chromium	Erosion of natural deposits	n/a	n/a	ug/L	No	ND	3.94	0.43	253	No	0.19	0.94	0.45	14	No	ND	2.91	0.84	168
Iron	Naturally occurring	300	n/a	ug/L	Yes	ND	756	97	485	No	ND	35	ND	14	Yes	ND	955	66	239
Lithium	Naturally occurring	n/a	n/a	ug/L	No	ND	5.0	ND	478	No	ND	ND	ND	13	No	ND	3.5	ND	204
Magnesium	Naturally occurring	n/a	n/a	mg/L	No	0.33	18.46	4.44	485	No	0.69	5.44	1.51	14	No	0.77	11.85	5.10	239
Manganese	Naturally occurring	300	n/a	ug/L	No	ND	109	15	485	No	ND	ND	ND	14	No	ND	99	15	239
Nickel	Alloys, coatings manufacturing, batteries	100	n/a	ug/L	No	ND	6.0	0.6	478	No	ND	1.0	ND	13	No	ND	3.4	0.5	204
Nitrate	Natural deposits, fertilizer, septic tanks	10	10	mg/L	No	ND	9.66	4.53	491	No	ND	4.15	1.06	14	No	0.07	9.62	4.84	509
Nitrite	Natural deposits, fertilizer, septic tanks	1	1	mg/L	No	ND	ND	ND	495	No	ND	ND	ND	14	No	ND	ND	ND	512
Perchlorate	Fertilizers, solid fuel propellant, fireworks	15	5	ug/L	No	ND	2.77	0.45	281	No	ND	2.06	0.45	18	No	ND	4.22	0.90	213
pH	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.5	8.7	7.3	442	No	6.5	7.5	7.0	18	No	6.5	8.6	7.2	228
pH, field	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.5	9.0	7.4	2745	No	6.7	8.0	7.3	263	No	6.2	8.5	7.3	2022
Phosphate, total	Added to keep iron in solution	n/a	n/a	mg/L	No	ND	3.09	0.47	485	No	ND	ND	ND	14	No	ND	2.19	0.43	239
Potassium	Naturally occurring	n/a	n/a	mg/L	No	0.25	3.74	1.19	485	No	0.35	1.27	0.52	14	No	0.37	3.52	1.35	239
Silicon	Naturally occurring	n/a	n/a	mg/L	No	3.1	10.8	6.6	478	No	4.4	7.8	5.2	13	No	4.8	10.5	7.3	204
Sodium	Naturally occurring	n/a	n/a	mg/L	No	3.2	65.9	18.2	485	No	3.8	12.9	5.9	14	No	3.9	78.9	22.6	239
Specific Conductance	Total of naturally occurring minerals	n/a	n/a	umho/cm	No	36	592	257	249	No	44	224	92	14	No	41	686	256	167
Strontium-88	Naturally occurring	n/a	n/a	mg/L	No	ND	0.211	0.056	478	No	ND	0.062	0.015	13	No	ND	0.204	0.070	204
Sulfate	Naturally occurring	250	n/a	mg/L	No	ND	30.3	14.0	495	No	ND	14.6	2.8	14	No	ND	32.6	11.7	512
Titanium	Naturally occurring	n/a	n/a	ug/L	No	ND	8.4	ND	485	No	ND	ND	ND	14	No	ND	ND	ND	239
Total Organic Carbon (TOC)	Naturally occurring	n/a	n/a	mg/L	No	ND	0.7	ND	26	No	ND	ND	ND	4	No	ND	0.7	ND	12
Turbidity	Silts and clays in aquifer	5	n/a	NTU	No	ND	4.15	0.63	248	No	ND	0.59	ND	14	No	ND	3.53	0.58	166
Uranium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	478	No	ND	ND	ND	13	No	ND	1.21	ND	204
Vanadium	Naturally occurring	n/a	n/a	ug/L	No	ND	5.4	ND	478	No	ND	ND	ND	13	No	ND	5.5	ND	204
Zinc	Naturally occurring, plumbing	5	n/a	mg/L	No	ND	0.02	ND	478	No	ND	0.04	ND	13	No	ND	0.06	ND	204
Synthetic Organic Compounds including Pesticides and Herbicides (August 26, 2020 NYS adopts an MCL of 1 ppb for 1,4 Dioxane, see page 34)																			
Alachlor ESA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	253	No	ND	ND	ND	13	No	ND	ND	ND	181
Alachlor OA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	253	No	ND	ND	ND	13	No	ND	ND	ND	181
Aldicarb Sulfone	Pesticide used on row crops	2	1	ug/L	No	ND	ND	ND	256	No	ND	ND	ND	13	No	ND	ND	ND	170
Aldicarb Sulfoxide	Pesticide used on row crops	4	1	ug/L	No	ND	ND	ND	256	No	ND	ND	ND	13	No	ND	ND	ND	170
Chlordane, Total	Residue of banned termiticide	2	n/a	ug/L	No	ND	0.29	ND	261	No	ND	ND	ND	13	No	ND	ND	ND	171
Diethyltoluamide (DEET)	Insect Repellent	50	n/a	ug/L	No	ND	0.25	ND	257	No	ND	ND	ND	13	No	ND	ND	ND	172
1,4-Dioxane	Used in manufacturing processes	*1	n/a	ug/L	No	ND	1.12	0.17	391	No	ND	0.40	0.11	15	No	ND	0.81	0.21	256
Metalaxyl	Used as a fungicide	50	n/a	ug/L	No	ND	ND	ND	257	No	ND	ND	ND	13	No	ND	ND	ND	172
Metolachlor ESA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	253	No	ND	ND	ND	13	No	ND	ND	ND	181
Metolachlor OA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	253	No	ND	ND	ND	13	No	ND	ND	ND	181
Tetrachloroterephthalic Acid	Used as a herbicide	50	n/a	ug/L	No	ND	5.31	ND	270	No	ND	ND	ND	13	No	ND	2.47	ND	175
Volatile Organic Compounds																			
Chlorobenzene	From industrial chemical factories	5	n/a	ug/L	No	ND	0.21	ND	556	No	ND	ND	ND	23	No	ND	0.35	ND	351
Chlorodifluoromethane	Used as a refrigerant	5	n/a	ug/L	No	ND	2.17	ND	556	No	ND	ND	ND	23	No	ND	ND	ND	351
Cis-1,2-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	0.91	ND	556	No	ND	ND	ND	23	No	ND	0.88	ND	351
1,3-Dichlorobenzene	Used as a fumigant and insecticide	5	n/a	ug/L	No	ND	ND	ND	556	No	ND	ND	ND	23	No	ND	ND	ND	351
Dichlorodifluoromethane	Refrigerant, aerosol propellant	5	n/a	ug/L	No	ND	2.86	ND	556	No	ND	ND	ND	23	No	ND	ND	ND	351
1,1-Dichloroethane	Degreaser, gasoline, manufacturing	5	n/a	ug/L	No	ND	2.70	ND	556	No	ND	0.31	ND	23	No	ND	1.58	ND	351
1,1-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	1.42	ND	556	No	ND	ND	ND	23	No	ND	0.98	ND	351
1,2-Dichloropropane	From industrial chemical factories	5	0	ug/L	No	ND	ND	ND	556	No	ND	ND	ND	23	No	ND	0.49	ND	351
Ethyl Benzene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	556	No	ND	ND	ND	23	No	ND	ND	ND	351
4-Methyl-2-Pentanone	From manufacturing facilities	50	n/a	ug/L	No	ND	2.79	ND	556	No	ND	ND	ND	23	No	ND	ND	ND	351
Methyl-Tert-Butyl Ether	Gasoline	10	n/a	ug/L	No	ND	0.97	ND	556	No	ND	ND	ND	23	No	ND	0.75	ND	351
o-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	0.43	ND	556	No	ND	ND	ND	23	No	ND	0.25	ND	351
p,m-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	0.28	ND	556	No	ND	ND	ND	23	No	ND	ND	ND	351
Tetrachloroethene	Factories, dry cleaners, spills	5	0	ug/L	No	ND	6.42	ND	556	No	ND	ND	ND	23	No	ND	0.77	ND	351
Toluene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	556	No	ND	ND	ND	23	No	ND	ND	ND	351
1,2,4-Trichlorobenzene	Discharge from textile-finishing factories	5	n/a	ug/L	No	ND	ND	ND	556	No	ND	ND	ND	23	No	ND	ND	ND	351
1,1,1-Trichloroethane	Metal degreasing sites, factories	5	n/a	ug/L	No	ND	1.80	ND	556	No	ND	ND	ND	23	No	ND	1.04	ND	351
Trichloroethene	Metal degreasing sites, factories	5	0	ug/L	No	ND	1.09	ND	556	No	ND	ND	ND	23	No	ND	0.50	ND	351
Trichlorofluoromethane	Dry cleaning,propellant,fire extinguishers	5	n/a	ug/L	No	ND	ND	ND	556	No	ND	ND	ND	23	No	ND	1.33	ND	351
1,2,3-Trichloropropane	Degreasing agent, manufacturing	5	n/a	ug/L	No	ND	ND	ND	556	No	ND	0.34	ND	23	No	ND	0.45	ND	351
1,1,2-Trichlorotrifluoroethane	Solvent in paints and varnishes	5	n/a	ug/L	No	ND	0.57	ND	556	No	ND	ND	ND	23	No	ND	0.67	ND	351

A101

WATER QUALITY DATA BY DISTRIBUTION AREA

Naturally Occuring Compounds as well as Contaminants

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 23					Distribution Area 26					Distribution Area 30				
					Range of Readings					Range of Readings					Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Inorganics																			
Alkalinity to pH 4.5 mg CaCO3/L	Naturally occurring	n/a	n/a	mg/L	No	21.8	104.2	49.6	109	No	32.0	150.6	61.7	31	No	ND	155.4	69.0	108
Aluminum	Naturally occurring	n/a	n/a	mg/L	No	ND	0.09	0.03	127	No	ND	0.08	0.03	29	No	ND	0.21	0.05	148
Ammonia, free	Some fertilizers, septic systems	n/a	n/a	mg/L	No	ND	ND	ND	63	No	ND	ND	ND	15	No	ND	ND	ND	72
Arsenic	Erosion of natural deposits	10	0	ug/L	No	ND	ND	ND	127	No	ND	ND	ND	29	No	ND	ND	ND	148
Barium	Erosion of natural deposits	2	2	mg/L	No	ND	0.09	0.03	127	No	0.02	0.10	0.05	29	No	ND	0.07	0.03	148
Boron	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	215	No	ND	ND	ND	132	No	ND	ND	ND	179
Bromide	Naturally occurring	n/a	n/a	ug/L	No	ND	164.5	ND	129	No	ND	124.5	63.8	33	No	ND	380.5	84.0	118
Calcium	Naturally occurring, pH control	n/a	n/a	mg/L	No	5.7	54.7	24.3	215	No	7.8	61.8	22.4	132	No	8.7	64.8	32.4	179
Chloride	Naturally occurring,salt water intrusion,road salt	250	n/a	mg/L	No	9.4	79.3	37.3	236	No	23.5	75.7	43.2	32	No	13.0	201.0	56.0	534
Chromium, total	Natural deposits	100	100	ug/L	No	ND	0.9	ND	127	No	ND	0.6	ND	29	No	ND	2.0	0.5	148
CO2, calculated	Naturally occurring	n/a	n/a	mg/L	No	0.1	24.1	5.9	109	No	0.6	11.0	4.0	31	No	0.3	30.3	7.9	108
Cobalt-59	Naturally occurring	n/a	n/a	ug/L	No	ND	3.8	ND	127	No	ND	0.8	ND	29	No	ND	ND	ND	148
Color, Apparent	Naturally occurring metals or minerals	15	n/a	Color Units	No	ND	12	ND	109	No	ND	10	ND	31	No	ND	7	ND	108
Copper	Household plumbing	AL=1.3	1.3	mg/L	No	ND	0.07	ND	127	No	ND	ND	ND	29	No	ND	0.24	ND	148
Fluoride	Erosion of natural deposits	2.2	n/a	mg/L	No	ND	ND	ND	236	No	ND	ND	ND	32	No	ND	ND	ND	534
Hardness, total	Measure of the calcium and magnesium	n/a	n/a	mg/L	No	21.2	166.2	80.4	215	No	36.1	199.9	83.3	132	No	33.2	225.6	111.9	179
Hexavalent Chromium	Erosion of natural deposits	n/a	n/a	ug/L	No	ND	0.69	0.31	109	No	ND	0.68	0.22	29	No	ND	1.69	0.32	108
Iron	Naturally occurring	300	n/a	ug/L	Yes	ND	815	123	215	Yes	ND	698	109	132	No	ND	136	37	179
Lithium	Naturally occurring	n/a	n/a	ug/L	No	ND	5.4	1.2	127	No	ND	2.2	1.1	29	No	ND	2.8	ND	148
Magnesium	Naturally occurring	n/a	n/a	mg/L	No	1.54	9.86	4.78	215	No	3.11	11.11	6.68	132	No	2.81	16.67	7.56	179
Manganese	Naturally occurring	300	n/a	ug/L	No	ND	186	31	215	No	ND	114	16	132	No	ND	218	30	179
Nickel	Alloys, coatings manufacturing, batteries	100	n/a	ug/L	No	ND	2.3	ND	127	No	ND	1.7	0.5	29	No	ND	1.9	ND	148
Nitrate	Natural deposits, fertilizer, septic tanks	10	10	mg/L	No	ND	9.31	3.69	235	No	0.14	4.08	1.89	32	No	0.68	8.25	4.77	530
Nitrite	Natural deposits, fertilizer, septic tanks	1	1	mg/L	No	ND	ND	ND	236	No	ND	ND	ND	32	No	ND	ND	ND	534
Perchlorate	Fertilizers, solid fuel propellant, fireworks	15	5	ug/L	No	ND	0.60	ND	132	No	ND	0.35	ND	37	No	ND	2.85	1.54	190
pH	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.6	8.8	7.4	166	No	7.1	8.1	7.6	44	No	6.6	8.8	7.4	237
pH, field	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.6	8.5	7.4	1226	No	6.9	8.5	7.6	248	No	6.9	8.8	7.5	858
Phosphate, total	Added to keep iron in solution	n/a	n/a	mg/L	No	ND	2.63	0.48	215	No	ND	3.27	1.31	132	No	ND	2.87	0.41	179
Potassium	Naturally occurring	n/a	n/a	mg/L	No	0.45	3.79	1.41	215	No	1.07	2.24	1.69	132	No	0.59	5.41	2.43	179
Silicon	Naturally occurring	n/a	n/a	mg/L	No	5.2	11.4	7.7	127	No	7.7	11.2	9.2	29	No	4.2	8.8	6.5	148
Sodium	Naturally occurring	n/a	n/a	mg/L	No	7.2	51.6	18.8	215	No	16.4	40.0	27.2	132	No	8.4	90.2	37.9	179
Specific Conductance	Total of naturally occurring minerals	n/a	n/a	umho/cm	No	91	481	238	109	No	97	439	302	31	No	128	830	406	108
Strontium-88	Naturally occurring	n/a	n/a	mg/L	No	0.023	0.136	0.071	127	No	0.044	0.126	0.079	29	No	0.041	0.213	0.109	148
Sulfate	Naturally occurring	250	n/a	mg/L	No	3.8	67.9	21.7	236	No	8.5	23.7	12.3	32	No	5.6	72.3	35.3	534
Titanium	Naturally occurring	n/a	n/a	ug/L	No	ND	6.1	ND	215	No	ND	ND	ND	132	No	ND	10.6	ND	179
Total Organic Carbon (TOC)	Naturally occurring	n/a	n/a	mg/L	No	ND	0.6	ND	10	No	ND	0.6	ND	6	No	ND	0.7	0.6	6
Turbidity	Silts and clays in aquifer	5	n/a	NTU	No	ND	2.19	0.53	109	No	ND	5.63	1.37	30	No	ND	2.22	0.60	108
Uranium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	127	No	ND	ND	ND	29	No	ND	ND	ND	148
Vanadium	Naturally occurring	n/a	n/a	ug/L	No	ND	6.3	ND	127	No	ND	ND	ND	29	No	ND	1.4	ND	148
Zinc	Naturally occurring, plumbing	5	n/a	mg/L	No	ND	ND	ND	127	No	ND	0.08	ND	29	No	ND	0.04	ND	148
Synthetic Organic Compounds including Pesticides and Herbicides (August 26, 2020 NYS adopts an MCL of 1 ppb for 1,4 Dioxane, see page 34)																			
Alachlor ESA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	134	No	ND	ND	ND	31	No	ND	1.72	ND	142
Alachlor OA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	134	No	ND	ND	ND	31	No	ND	1.12	ND	142
Aldicarb Sulfone	Pesticide used on row crops	2	1	ug/L	No	ND	ND	ND	135	No	ND	ND	ND	31	No	ND	0.61	ND	199
Aldicarb Sulfoxide	Pesticide used on row crops	4	1	ug/L	No	ND	ND	ND	135	No	ND	ND	ND	31	No	ND	0.53	ND	199
Chlordane, Total	Residue of banned termiticide	2	n/a	ug/L	No	ND	ND	ND	123	No	ND	ND	ND	31	No	ND	ND	ND	121
Diethyltoluamide (DEET)	Insect Repellent	50	n/a	ug/L	No	ND	ND	ND	125	No	ND	ND	ND	30	No	ND	ND	ND	134
1,4-Dioxane	Used in manufacturing processes	*1	n/a	ug/L	No	ND	0.24	ND	144	No	ND	0.82	0.08	41	No	ND	0.10	ND	136
Metalaxyl	Used as a fungicide	50	n/a	ug/L	No	ND	ND	ND	125	No	ND	ND	ND	30	No	ND	0.53	ND	134
Metolachlor ESA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	1.14	ND	134	No	ND	ND	ND	31	No	ND	2.72	ND	142
Metolachlor OA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	134	No	ND	ND	ND	31	No	ND	3.09	ND	142
Tetrachloroterephthalic Acid	Used as a herbicide	50	n/a	ug/L	No	ND	1.47	ND	127	No	ND	ND	ND	32	No	ND	8.61	1.58	179
Volatile Organic Compounds																			
Chlorobenzene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
Chlorodifluoromethane	Used as a refrigerant	5	n/a	ug/L	No	ND	5.11	0.28	210	No	ND	0.97	ND	55	No	ND	ND	ND	184
Cis-1,2-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
1,3-Dichlorobenzene	Used as a fumigant and insecticide	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
Dichlorodifluoromethane	Refrigerant, aerosol propellant	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	0.51	ND	55	No	ND	ND	ND	184
1,1-Dichloroethane	Degreaser, gasoline, manufacturing	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
1,1-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
1,2-Dichloropropane	From industrial chemical factories	5	0	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	0.36	ND	184
Ethyl Benzene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	0.29	ND	55	No	ND	ND	ND	184
4-Methyl-2-Pentanone	From manufacturing facilities	50	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
Methyl-Tert-Butyl Ether	Gasoline	10	n/a	ug/L	No	ND	0.29	ND	210	No	ND	0.27	ND	55	No	ND	0.27	ND	184
o-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	0.16	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
p,m-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
Tetrachloroethene	Factories, dry cleaners, spills	5	0	ug/L	No	ND	ND	ND	210	No	ND	0.56	ND	55	No	ND	ND	ND	184
Toluene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
1,2,4-Trichlorobenzene	Discharge from textile-finishing factories	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
1,1,1-Trichloroethane	Metal degreasing sites, factories	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
Trichloroethene	Metal degreasing sites, factories	5	0	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
Trichlorofluoromethane	Dry cleaning,propellant,fire extinguishers	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
1,2,3-Trichloropropane	Degreasing agent, manufacturing	5	n/a	ug/L	No	ND	0.29	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184
1,1,2-Trichlorotrifluoroethane	Solvent in paints and varnishes	5	n/a	ug/L	No	ND	ND	ND	210	No	ND	ND	ND	55	No	ND	ND	ND	184

A102

WATER QUALITY DATA BY DISTRIBUTION AREA

Naturally Occuring Compounds as well as Contaminants

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 32					Distribution Area 34					Distribution Area 35				
					Range of Readings					Range of Readings					Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Inorganics																			
Alkalinity to pH 4.5 mg CaCO3/L	Naturally occurring	n/a	n/a	mg/L	No	29.6	72.4	46.4	6	No	38.8	50.6	43.0	6	No	62.4	101.6	85.3	10
Aluminum	Naturally occurring	n/a	n/a	mg/L	No	ND	0.08	0.06	6	No	ND	0.03	ND	6	No	ND	ND	ND	10
Ammonia, free	Some fertilizers, septic systems	n/a	n/a	mg/L	No	ND	ND	ND	3	No	ND	ND	ND	3	No	ND	ND	ND	5
Arsenic	Erosion of natural deposits	10	0	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Barium	Erosion of natural deposits	2	2	mg/L	No	ND	0.02	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Boron	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Bromide	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	143.1	65.4	10
Calcium	Naturally occurring, pH control	n/a	n/a	mg/L	No	8.9	21.7	16.2	6	No	13.3	16.6	14.7	6	No	25.1	31.2	27.6	10
Chloride	Naturally occurring,salt water intrusion,road salt	250	n/a	mg/L	No	25.8	106.9	61.2	6	No	12.1	15.5	13.7	6	No	ND	67.6	21.2	42
Chromium, total	Natural deposits	100	100	ug/L	No	0.6	1.6	0.8	6	No	ND	0.7	ND	6	No	ND	ND	ND	10
CO2, calculated	Naturally occurring	n/a	n/a	mg/L	No	1.9	17.0	5.5	6	No	2.4	6.7	5.3	6	No	6.1	12.6	9.5	10
Cobalt-59	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Color, Apparent	Naturally occurring metals or minerals	15	n/a	Color Units	No	ND	5	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Copper	Household plumbing	AL=1.3	1.3	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	0.14	0.09	10
Fluoride	Erosion of natural deposits	2.2	n/a	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	42
Hardness, total	Measure of the calcium and magnesium	n/a	n/a	mg/L	No	31.2	64.0	50.4	6	No	45.0	59.6	51.0	6	No	95.5	132.6	111.1	10
Hexavalent Chromium	Erosion of natural deposits	n/a	n/a	ug/L	No	0.35	1.28	0.69	6	No	0.20	0.58	0.39	6	No	ND	0.55	0.13	10
Iron	Naturally occurring	300	n/a	ug/L	No	ND	68	40	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Lithium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	1.1	ND	6	No	ND	ND	ND	10
Magnesium	Naturally occurring	n/a	n/a	mg/L	No	2.16	2.62	2.41	6	No	2.57	5.08	3.49	6	No	7.82	13.29	10.28	10
Manganese	Naturally occurring	300	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Nickel	Alloys, coatings manufacturing, batteries	100	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	0.6	ND	10
Nitrate	Natural deposits, fertilizer, septic tanks	10	10	mg/L	No	0.34	0.95	0.60	6	No	0.46	0.79	0.61	6	No	ND	6.73	4.03	42
Nitrite	Natural deposits, fertilizer, septic tanks	1	1	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	0.067	ND	42
Perchlorate	Fertilizers, solid fuel propellant, fireworks	15	5	ug/L	No	ND	0.32	ND	8	No	ND	0.36	ND	8	No	ND	1.43	0.33	23
pH	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.9	7.6	7.3	8	No	7.1	7.6	7.3	7	No	7.0	7.5	7.3	18
pH, field	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	7.0	8.0	7.5	63	No	7.0	7.9	7.4	107	No	7.0	8.6	7.4	94
Phosphate, total	Added to keep iron in solution	n/a	n/a	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Potassium	Naturally occurring	n/a	n/a	mg/L	No	0.58	0.89	0.71	6	No	0.67	0.88	0.75	6	No	1.22	1.56	1.41	10
Silicon	Naturally occurring	n/a	n/a	mg/L	No	4.0	5.6	4.7	6	No	5.8	8.5	6.8	6	No	7.8	8.9	8.3	10
Sodium	Naturally occurring	n/a	n/a	mg/L	No	11.7	63.1	37.5	6	No	8.6	10.8	9.5	6	No	29.4	50.3	40.3	10
Specific Conductance	Total of naturally occurring minerals	n/a	n/a	umho/cm	No	239	441	314	6	No	144	176	158	6	No	367	549	431	10
Strontium-88	Naturally occurring	n/a	n/a	mg/L	No	0.044	0.064	0.057	6	No	0.036	0.062	0.046	6	No	0.094	0.150	0.121	10
Sulfate	Naturally occurring	250	n/a	mg/L	No	5.1	7.6	6.5	6	No	8.0	16.7	11.0	6	No	ND	76.1	34.5	42
Titanium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Total Organic Carbon (TOC)	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	2	No	ND	0.5	ND	2	No	ND	0.5	ND	2
Turbidity	Silts and clays in aquifer	5	n/a	NTU	No	ND	1.22	0.80	6	No	ND	0.62	ND	6	No	ND	0.74	ND	10
Uranium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Vanadium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	3.1	ND	6	No	ND	ND	ND	10
Zinc	Naturally occurring, plumbing	5	n/a	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	0.04	0.02	10
Synthetic Organic Compounds including Pesticides and Herbicides (August 26, 2020 NYS adopts an MCL of 1 ppb for 1,4 Dioxane, see page 34)																			
Alachlor ESA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	14
Alachlor OA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	14
Aldicarb Sulfone	Pesticide used on row crops	2	1	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Aldicarb Sulfoxide	Pesticide used on row crops	4	1	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Chlordane, Total	Residue of banned termiticide	2	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Diethyltoluamide (DEET)	Insect Repellent	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	14
1,4-Dioxane	Used in manufacturing processes	*1	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	10
Metalaxyl	Used as a fungicide	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	14
Metolachlor ESA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	14
Metolachlor OA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	ND	ND	14
Tetrachloroterephthalic Acid	Used as a herbicide	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	6	No	ND	8.57	1.22	29
Volatile Organic Compounds																			
Chlorobenzene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
Chlorodifluoromethane	Used as a refrigerant	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
Cis-1,2-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
1,3-Dichlorobenzene	Used as a fumigant and insecticide	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
Dichlorodifluoromethane	Refrigerant, aerosol propellant	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
1,1-Dichloroethane	Degreaser, gasoline, manufacturing	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
1,1-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
1,2-Dichloropropane	From industrial chemical factories	5	0	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	0.47	ND	31
Ethyl Benzene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
4-Methyl-2-Pentanone	From manufacturing facilities	50	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
Methyl-Tert-Butyl Ether	Gasoline	10	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
o-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
p,m-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
Tetrachloroethene	Factories, dry cleaners, spills	5	0	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	10	No	ND	ND	ND	31
Toluene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
1,2,4-Trichlorobenzene	Discharge from textile-finishing factories	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
1,1,1-Trichloroethane	Metal degreasing sites, factories	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
Trichloroethene	Metal degreasing sites, factories	5	0	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
Trichlorofluoromethane	Dry cleaning,propellant,fire extinguishers	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
1,2,3-Trichloropropane	Degreasing agent, manufacturing	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31
1,1,2-Trichlorotrifluoroethane	Solvent in paints and varnishes	5	n/a	ug/L	No	ND	ND	ND	9	No	ND	ND	ND	10	No	ND	ND	ND	31

A103

WATER QUALITY DATA BY DISTRIBUTION AREA

Naturally Occuring Compounds as well as Contaminants

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 44					Distribution Area 53					Distribution Area 54				
					Range of Readings					Range of Readings					Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Inorganics																			
Alkalinity to pH 4.5 mg CaCO3/L	Naturally occurring	n/a	n/a	mg/L	No	35.4	48.0	41.4	6	No	ND	48.6	37.2	19	No	23.2	38.8	32.0	29
Aluminum	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	6	No	0.03	0.88	0.31	31	No	0.03	0.63	0.27	44
Ammonia, free	Some fertilizers, septic systems	n/a	n/a	mg/L	No	ND	ND	ND	3	No	ND	ND	ND	10	No	ND	ND	ND	18
Arsenic	Erosion of natural deposits	10	0	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	31	No	ND	ND	ND	44
Barium	Erosion of natural deposits	2	2	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	31	No	ND	ND	ND	44
Boron	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	6	No	ND	0.10	ND	72	No	ND	0.13	ND	77
Bromide	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	28	No	ND	ND	ND	47
Calcium	Naturally occurring, pH control	n/a	n/a	mg/L	No	12.0	22.2	16.1	6	No	ND	1.0	0.5	72	No	ND	1.2	ND	77
Chloride	Naturally occurring,salt water intrusion,road salt	250	n/a	mg/L	No	14.0	25.4	18.3	6	No	4.1	5.5	4.7	20	No	3.9	9.3	5.0	30
Chromium, total	Natural deposits	100	100	ug/L	No	ND	0.6	ND	6	No	ND	1.1	ND	31	No	ND	1.0	ND	44
CO2, calculated	Naturally occurring	n/a	n/a	mg/L	No	1.3	16.2	7.0	6	No	1.2	15.0	7.0	19	No	1.0	14.1	5.0	29
Cobalt-59	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	31	No	ND	ND	ND	44
Color, Apparent	Naturally occurring metals or minerals	15	n/a	Color Units	No	ND	5	ND	6	Yes	20	8	19	No	ND	12	6	29
Copper	Household plumbing	AL=1.3	1.3	mg/L	No	ND	ND	ND	6	No	ND	0.05	ND	31	No	ND	0.04	ND	44
Fluoride	Erosion of natural deposits	2.2	n/a	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	0.2	ND	30
Hardness, total	Measure of the calcium and magnesium	n/a	n/a	mg/L	No	43.8	74.7	55.4	6	No	ND	4.5	ND	72	No	ND	3.3	ND	77
Hexavalent Chromium	Erosion of natural deposits	n/a	n/a	ug/L	No	0.18	0.50	0.33	6	No	ND	0.30	0.11	20	No	ND	0.50	0.12	30
Iron	Naturally occurring	300	n/a	ug/L	No	ND	113	34	6	Yes	172	695	348	72	Yes	55	657	238	77
Lithium	Naturally occurring	n/a	n/a	ug/L	No	ND	2.1	ND	6	No	4.6	10.7	6.5	31	No	2.5	6.5	4.1	44
Magnesium	Naturally occurring	n/a	n/a	mg/L	No	3.33	4.68	3.70	6	No	ND	0.49	ND	72	No	ND	0.22	ND	77
Manganese	Naturally occurring	300	n/a	ug/L	No	ND	25	ND	6	No	ND	12	ND	72	No	ND	ND	ND	77
Nickel	Alloys, coatings manufacturing, batteries	100	n/a	ug/L	No	ND	ND	ND	6	No	ND	5.8	0.7	31	No	ND	6.4	0.6	44
Nitrate	Natural deposits, fertilizer, septic tanks	10	10	mg/L	No	0.33	1.52	0.86	6	No	ND	0.02	ND	20	No	ND	0.02	ND	30
Nitrite	Natural deposits, fertilizer, septic tanks	1	1	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	ND	ND	30
Perchlorate	Fertilizers, solid fuel propellant, fireworks	15	5	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	28	No	ND	ND	ND	40
pH	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.7	7.9	7.2	6	No	6.6	7.9	7.1	19	No	6.6	7.8	7.2	31
pH, field	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	7.0	8.2	7.4	56	No	6.4	8.0	7.2	72	No	7.0	8.0	7.3	138
Phosphate, total	Added to keep iron in solution	n/a	n/a	mg/L	No	ND	ND	ND	6	No	ND	3.57	1.05	72	No	ND	2.71	0.34	77
Potassium	Naturally occurring	n/a	n/a	mg/L	No	0.74	1.43	0.90	6	No	1.62	4.42	2.95	72	No	0.94	3.61	1.73	77
Silicon	Naturally occurring	n/a	n/a	mg/L	No	6.3	10.0	7.2	6	No	4.3	5.7	4.9	31	No	4.4	5.7	5.0	44
Sodium	Naturally occurring	n/a	n/a	mg/L	No	9.6	14.0	11.4	6	No	8.8	23.8	18.9	72	No	10.8	22.5	16.6	77
Specific Conductance	Total of naturally occurring minerals	n/a	n/a	umho/cm	No	153	218	183	6	No	61	118	100	19	No	72	116	86	29
Strontium-88	Naturally occurring	n/a	n/a	mg/L	No	0.042	0.079	0.054	6	No	ND	ND	ND	31	No	ND	ND	ND	44
Sulfate	Naturally occurring	250	n/a	mg/L	No	10.2	32.4	14.8	6	No	4.1	5.2	4.7	20	No	3.7	5.6	4.2	30
Titanium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	49.0	14.8	72	No	ND	36.0	10.2	77
Total Organic Carbon (TOC)	Naturally occurring	n/a	n/a	mg/L	No	0.5	0.5	0.5	2	No	0.5	1.0	0.7	8	No	0.7	1.3	0.9	10
Turbidity	Silts and clays in aquifer	5	n/a	NTU	No	ND	0.56	ND	6	No	ND	4.87	2.06	19	No	ND	3.29	1.30	29
Uranium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	31	No	ND	ND	ND	44
Vanadium	Naturally occurring	n/a	n/a	ug/L	No	ND	4.4	1.1	6	No	ND	ND	ND	31	No	ND	ND	ND	44
Zinc	Naturally occurring, plumbing	5	n/a	mg/L	No	ND	ND	ND	6	No	ND	0.04	ND	31	No	ND	0.02	ND	44
Synthetic Organic Compounds including Pesticides and Herbicides (August 26, 2020 NYS adopts an MCL of 1 ppb for 1,4 Dioxane, see page 34)																			
Alachlor ESA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	ND	ND	30
Alachlor OA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	ND	ND	30
Aldicarb Sulfone	Pesticide used on row crops	2	1	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	ND	ND	30
Aldicarb Sulfoxide	Pesticide used on row crops	4	1	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	ND	ND	30
Chlordane, Total	Residue of banned termiticide	2	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	ND	ND	30
Diethyltoluamide (DEET)	Insect Repellent	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	ND	ND	30
1,4-Dioxane	Used in manufacturing processes	*1	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	ND	ND	30
Metalaxyl	Used as a fungicide	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	ND	ND	30
Metolachlor ESA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	ND	ND	30
Metolachlor OA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	20	No	ND	ND	ND	30
Tetrachloroterephthalic Acid	Used as a herbicide	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	21	No	ND	1.32	ND	30
Volatile Organic Compounds																			
Chlorobenzene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
Chlorodifluoromethane	Used as a refrigerant	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
Cis-1,2-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
1,3-Dichlorobenzene	Used as a fumigant and insecticide	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
Dichlorodifluoromethane	Refrigerant, aerosol propellant	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
1,1-Dichloroethane	Degreaser, gasoline, manufacturing	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
1,1-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
1,2-Dichloropropane	From industrial chemical factories	5	0	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
Ethyl Benzene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
4-Methyl-2-Pentanone	From manufacturing facilities	50	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
Methyl-Tert-Butyl Ether	Gasoline	10	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
o-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
p,m-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
Tetrachloroethene	Factories, dry cleaners, spills	5	0	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
Toluene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
1,2,4-Trichlorobenzene	Discharge from textile-finishing factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
1,1,1-Trichloroethane	Metal degreasing sites, factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
Trichloroethene	Metal degreasing sites, factories	5	0	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
Trichlorofluoromethane	Dry cleaning,propellant,fire extinguishers	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
1,2,3-Trichloropropane	Degreasing agent, manufacturing	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35
1,1,2-Trichlorotrifluoroethane	Solvent in paints and varnishes	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	28	No	ND	ND	ND	35

A104

WATER QUALITY DATA BY DISTRIBUTION AREA

Naturally Occuring Compounds as well as Contaminants

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area 57					Distribution Area 64					Distribution Area EFWD				
						Range of Readings					Range of Readings					Range of Readings			
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Inorganics																			
Alkalinity to pH 4.5 mg CaCO3/L	Naturally occurring	n/a	n/a	mg/L	No	32.2	67.4	51.6	6	No	52.4	76.6	63.2	8	No	28.6	44.4	37.6	6
Aluminum	Naturally occurring	n/a	n/a	mg/L	No	ND	0.03	ND	6	No	ND	ND	ND	8	No	ND	0.10	0.05	8
Ammonia, free	Some fertilizers, septic systems	n/a	n/a	mg/L	No	ND	ND	ND	3	No	ND	ND	ND	5	No	ND	ND	ND	3
Arsenic	Erosion of natural deposits	10	0	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	8
Barium	Erosion of natural deposits	2	2	mg/L	No	ND	0.03	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	8
Boron	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	37	No	ND	ND	ND	7
Bromide	Naturally occurring	n/a	n/a	ug/L	No	ND	62.9	ND	6	No	ND	221.1	73.1	12	No	ND	55.2	ND	14
Calcium	Naturally occurring, pH control	n/a	n/a	mg/L	No	10.2	24.2	18.9	6	No	7.5	11.8	9.6	37	No	7.5	18.5	13.4	7
Chloride	Naturally occurring,salt water intrusion,road salt	250	n/a	mg/L	No	25.4	37.9	32.3	6	No	22.0	79.8	37.5	8	No	6.6	14.2	10.5	6
Chromium, total	Natural deposits	100	100	ug/L	No	ND	0.7	ND	6	No	ND	0.8	0.5	8	No	ND	ND	ND	8
CO2, calculated	Naturally occurring	n/a	n/a	mg/L	No	1.6	6.4	3.5	6	No	1.4	39.4	12.3	8	No	0.6	6.6	3.0	6
Cobalt-59	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	2.5	1.2	8
Color, Apparent	Naturally occurring metals or minerals	15	n/a	Color Units	No	ND	5	ND	6	No	ND	ND	ND	8	No	ND	10	ND	6
Copper	Household plumbing	AL=1.3	1.3	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	8
Fluoride	Erosion of natural deposits	2.2	n/a	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
Hardness, total	Measure of the calcium and magnesium	n/a	n/a	mg/L	No	43.6	82.5	66.6	6	No	34.3	64.0	45.9	37	No	25.4	53.5	38.1	7
Hexavalent Chromium	Erosion of natural deposits	n/a	n/a	ug/L	No	0.29	0.54	0.40	6	No	0.26	0.41	0.35	8	No	ND	0.23	0.13	6
Iron	Naturally occurring	300	n/a	ug/L	No	ND	33	ND	6	No	ND	273	52	37	No	ND	266	91	7
Lithium	Naturally occurring	n/a	n/a	ug/L	No	ND	2.4	1.3	6	No	ND	ND	ND	8	No	ND	1.1	ND	8
Magnesium	Naturally occurring	n/a	n/a	mg/L	No	4.28	5.47	4.72	6	No	3.60	9.52	5.30	37	No	0.54	1.79	1.10	7
Manganese	Naturally occurring	300	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	37	No	ND	10	ND	7
Nickel	Alloys, coatings manufacturing, batteries	100	n/a	ug/L	No	ND	ND	ND	6	No	ND	0.9	ND	8	No	1.0	3.4	2.2	8
Nitrate	Natural deposits, fertilizer, septic tanks	10	10	mg/L	No	0.67	2.38	1.38	6	No	0.50	1.46	1.00	8	No	0.05	3.07	0.76	6
Nitrite	Natural deposits, fertilizer, septic tanks	1	1	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
Perchlorate	Fertilizers, solid fuel propellant, fireworks	15	5	ug/L	No	ND	ND	ND	8	No	ND	ND	ND	10	No	ND	ND	ND	10
pH	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	7.2	7.8	7.5	6	No	6.5	8.0	7.3	15	No	7.1	8.7	7.6	11
pH, field	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	6.8	8.3	7.7	56	No	7.0	8.5	7.4	31	No	7.0	8.0	7.5	156
Phosphate, total	Added to keep iron in solution	n/a	n/a	mg/L	No	ND	0.20	ND	6	No	ND	1.52	1.15	37	No	ND	0.35	ND	7
Potassium	Naturally occurring	n/a	n/a	mg/L	No	0.94	1.49	1.20	6	No	0.82	1.71	1.16	37	No	0.40	0.83	0.59	7
Silicon	Naturally occurring	n/a	n/a	mg/L	No	7.8	9.8	9.0	6	No	8.5	9.9	9.5	8	No	3.4	3.7	3.5	8
Sodium	Naturally occurring	n/a	n/a	mg/L	No	16.9	22.1	19.8	6	No	23.5	68.7	39.1	37	No	4.3	8.2	5.8	7
Specific Conductance	Total of naturally occurring minerals	n/a	n/a	umho/cm	No	180	291	244	6	No	212	436	276	8	No	79	153	120	6
Strontium-88	Naturally occurring	n/a	n/a	mg/L	No	0.046	0.079	0.066	6	No	0.047	0.074	0.059	8	No	0.016	0.037	0.028	8
Sulfate	Naturally occurring	250	n/a	mg/L	No	9.0	12.4	10.0	6	No	9.9	11.9	10.5	8	No	ND	4.5	ND	6
Titanium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	37	No	ND	6.2	ND	7
Total Organic Carbon (TOC)	Naturally occurring	n/a	n/a	mg/L	No	0.5	0.7	0.6	2	No	0.6	0.6	0.6	2	No	ND	0.5	ND	4
Turbidity	Silts and clays in aquifer	5	n/a	NTU	No	ND	0.41	ND	6	No	ND	0.59	ND	8	No	ND	1.04	0.46	6
Uranium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	8
Vanadium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	8
Zinc	Naturally occurring, plumbing	5	n/a	mg/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	8
Synthetic Organic Compounds including Pesticides and Herbicides (August 26, 2020 NYS adopts an MCL of 1 ppb for 1,4 Dioxane, see page 34)																			
Alachlor ESA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
Alachlor OA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
Aldicarb Sulfone	Pesticide used on row crops	2	1	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
Aldicarb Sulfoxide	Pesticide used on row crops	4	1	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
Chlordane, Total	Residue of banned termiticide	2	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
Diethyltoluamide (DEET)	Insect Repellent	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
1,4-Dioxane	Used in manufacturing processes	*1	n/a	ug/L	No	ND	0.07	ND	6	No	ND	ND	ND	12	No	ND	2.40	0.47	6
Metalaxyl	Used as a fungicide	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
Metolachlor ESA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
Metolachlor OA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
Tetrachloroterephthalic Acid	Used as a herbicide	50	n/a	ug/L	No	ND	ND	ND	6	No	ND	ND	ND	8	No	ND	ND	ND	6
Volatile Organic Compounds																			
Chlorobenzene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
Chlorodifluoromethane	Used as a refrigerant	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	2.15	0.52	21
Cis-1,2-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
1,3-Dichlorobenzene	Used as a fumigant and insecticide	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
Dichlorodifluoromethane	Refrigerant, aerosol propellant	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
1,1-Dichloroethane	Degreaser, gasoline, manufacturing	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
1,1-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
1,2-Dichloropropane	From industrial chemical factories	5	0	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
Ethyl Benzene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
4-Methyl-2-Pentanone	From manufacturing facilities	50	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
Methyl-Tert-Butyl Ether	Gasoline	10	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
o-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
p,m-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
Tetrachloroethene	Factories, dry cleaners, spills	5	0	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
Toluene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
1,2,4-Trichlorobenzene	Discharge from textile-finishing factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
1,1,1-Trichloroethane	Metal degreasing sites, factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
Trichloroethene	Metal degreasing sites, factories	5	0	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
Trichlorofluoromethane	Dry cleaning,propellant,fire extinguishers	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
1,2,3-Trichloropropane	Degreasing agent, manufacturing	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21
1,1,2-Trichlorotrifluoroethane	Solvent in paints and varnishes	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	20	No	ND	ND	ND	21

A105

WATER QUALITY DATA BY DISTRIBUTION AREA

Naturally Occuring Compounds as well as Contaminants

Detected Compound	Likely Source	MCL	MCLG	Unit of Measure	Distribution Area RSWD					Distribution Area SBWD					Distribution Area WNWD				
					Range of Readings					Range of Readings					Range of Readings				
					Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests	Violation Yes/No	Low Value	High Value	Avg. Value	No. of Tests
Inorganics																			
Alkalinity to pH 4.5 mg CaCO3/L	Naturally occurring	n/a	n/a	mg/L	No	28.6	29.6	29.1	2	No	ND	43.4	26.7	4	No	84.8	109.0	96.3	8
Aluminum	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	2	No	ND	0.06	0.02	4	No	ND	ND	ND	10
Ammonia, free	Some fertilizers, septic systems	n/a	n/a	mg/L	No	ND	ND	ND	1	No	ND	ND	ND	2	No	ND	ND	ND	3
Arsenic	Erosion of natural deposits	10	0	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	10
Barium	Erosion of natural deposits	2	2	mg/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	0.04	0.02	10
Boron	Naturally occurring	n/a	n/a	mg/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	37
Bromide	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	54.5	ND	9
Calcium	Naturally occurring, pH control	n/a	n/a	mg/L	No	9.1	10.2	9.7	2	No	4.2	18.0	11.0	4	No	6.6	13.3	9.5	37
Chloride	Naturally occurring,salt water intrusion,road salt	250	n/a	mg/L	No	11.8	18.7	15.2	2	No	5.1	14.1	9.1	4	No	15.2	32.7	21.9	17
Chromium, total	Natural deposits	100	100	ug/L	No	0.5	0.8	0.6	2	No	ND	1.5	0.8	4	No	ND	1.5	0.8	10
CO2, calculated	Naturally occurring	n/a	n/a	mg/L	No	1.9	2.6	2.2	2	No	3.5	7.9	5.6	4	No	1.7	60.8	21.4	8
Cobalt-59	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	10
Color, Apparent	Naturally occurring metals or minerals	15	n/a	Color Units	No	ND	7	ND	2	No	ND	5	ND	4	No	ND	10	ND	8
Copper	Household plumbing	AL=1.3	1.3	mg/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	0.07	0.03	10
Fluoride	Erosion of natural deposits	2.2	n/a	mg/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	17
Hardness, total	Measure of the calcium and magnesium	n/a	n/a	mg/L	No	32.9	36.7	34.8	2	No	13.8	55.8	34.2	4	No	23.0	49.0	37.7	37
Hexavalent Chromium	Erosion of natural deposits	n/a	n/a	ug/L	No	0.47	1.01	0.74	2	No	0.30	1.54	0.93	4	No	0.11	1.10	0.64	8
Iron	Naturally occurring	300	n/a	ug/L	Yes	ND	322	168	2	No	ND	73	39	4	No	ND	ND	ND	37
Lithium	Naturally occurring	n/a	n/a	ug/L	No	ND	1.2	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	10
Magnesium	Naturally occurring	n/a	n/a	mg/L	No	2.45	2.73	2.59	2	No	0.77	2.63	1.66	4	No	1.55	4.61	3.39	37
Manganese	Naturally occurring	300	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	41	ND	37
Nickel	Alloys, coatings manufacturing, batteries	100	n/a	ug/L	No	ND	ND	ND	2	No	ND	0.6	ND	4	No	ND	ND	ND	10
Nitrate	Natural deposits, fertilizer, septic tanks	10	10	mg/L	No	0.06	0.09	0.08	2	No	0.12	3.20	1.50	4	No	2.46	6.26	4.39	17
Nitrite	Natural deposits, fertilizer, septic tanks	1	1	mg/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	17
Perchlorate	Fertilizers, solid fuel propellant, fireworks	15	5	ug/L	No	ND	ND	ND	4	No	ND	0.33	ND	8	No	ND	0.35	ND	9
pH	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	7.4	7.5	7.4	2	No	6.7	7.4	7.0	4	No	6.5	8.0	7.1	13
pH, field	Measure of water acidity or alkalinity	n/a	n/a	pH Units	No	7.0	7.7	7.2	48	No	6.7	7.9	7.3	96	No	7.0	7.6	7.2	29
Phosphate, total	Added to keep iron in solution	n/a	n/a	mg/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	0.40	1.29	0.74	37
Potassium	Naturally occurring	n/a	n/a	mg/L	No	0.60	0.63	0.61	2	No	0.36	0.68	0.52	4	No	1.10	2.60	1.86	37
Silicon	Naturally occurring	n/a	n/a	mg/L	No	6.7	6.9	6.8	2	No	4.6	5.9	5.5	4	No	5.2	8.3	6.8	10
Sodium	Naturally occurring	n/a	n/a	mg/L	No	7.8	11.6	9.7	2	No	4.3	9.3	6.7	4	No	39.2	66.3	52.6	37
Specific Conductance	Total of naturally occurring minerals	n/a	n/a	umho/cm	No	115	151	133	2	No	55	167	109	4	No	255	382	315	8
Strontium-88	Naturally occurring	n/a	n/a	mg/L	No	0.034	0.036	0.035	2	No	ND	0.035	0.020	4	No	0.050	0.086	0.065	10
Sulfate	Naturally occurring	250	n/a	mg/L	No	7.0	7.7	7.3	2	No	ND	3.9	2.5	4	No	9.5	12.9	10.7	17
Titanium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	37
Total Organic Carbon (TOC)	Naturally occurring	n/a	n/a	mg/L	No	ND	0.6	ND	2	No	ND	ND	ND	4	No	0.8	0.9	0.8	2
Turbidity	Silts and clays in aquifer	5	n/a	NTU	No	ND	0.87	0.53	2	No	ND	0.93	ND	4	No	ND	0.65	ND	8
Uranium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	10
Vanadium	Naturally occurring	n/a	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	10
Zinc	Naturally occurring, plumbing	5	n/a	mg/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	10
Synthetic Organic Compounds including Pesticides and Herbicides (August 26, 2020 NYS adopts an MCL of 1 ppb for 1,4 Dioxane, see page 34)																			
Alachlor ESA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	7
Alachlor OA	Degradation product of Alachlor	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	7
Aldicarb Sulfone	Pesticide used on row crops	2	1	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	7
Aldicarb Sulfoxide	Pesticide used on row crops	4	1	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	7
Chlordane, Total	Residue of banned termiticide	2	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	7
Diethyltoluamide (DEET)	Insect Repellent	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	7
1,4-Dioxane	Used in manufacturing processes	*1	n/a	ug/L	No	ND	ND	ND	2	No	ND	0.26	0.12	4	No	ND	ND	ND	7
Metalaxyl	Used as a fungicide	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	7
Metolachlor ESA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	7
Metolachlor OA	Degradation product of Metolachlor	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	7
Tetrachloroterephthalic Acid	Used as a herbicide	50	n/a	ug/L	No	ND	ND	ND	2	No	ND	ND	ND	4	No	ND	ND	ND	7
Volatile Organic Compounds																			
Chlorobenzene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
Chlorodifluoromethane	Used as a refrigerant	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
Cis-1,2-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
1,3-Dichlorobenzene	Used as a fumigant and insecticide	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
Dichlorodifluoromethane	Refrigerant, aerosol propellant	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
1,1-Dichloroethane	Degreaser, gasoline, manufacturing	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	0.34	ND	12	No	ND	ND	ND	19
1,1-Dichloroethene	From industrial chemical factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
1,2-Dichloropropane	From industrial chemical factories	5	0	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
Ethyl Benzene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
4-Methyl-2-Pentanone	From manufacturing facilities	50	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
Methyl-Tert-Butyl Ether	Gasoline	10	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
o-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
p,m-Xylene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
Tetrachloroethene	Factories, dry cleaners, spills	5	0	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
Toluene	From paint on inside of water storage tank	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
1,2,4-Trichlorobenzene	Discharge from textile-finishing factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
1,1,1-Trichloroethane	Metal degreasing sites, factories	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	0.31	ND	12	No	ND	ND	ND	19
Trichloroethene	Metal degreasing sites, factories	5	0	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
Trichlorofluoromethane	Dry cleaning,propellant,fire extinguishers	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
1,2,3-Trichloropropane	Degreasing agent, manufacturing	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19
1,1,2-Trichlorotrifluoroethane	Solvent in paints and varnishes	5	n/a	ug/L	No	ND	ND	ND	10	No	ND	ND	ND	12	No	ND	ND	ND	19

A106

WELL MONITORING FOR TOTAL COLIFORM

All SCWA wells prior to chlorination (source water monitoring) and the chlorinated water leaving the pump stations are tested quarterly for total coliform bacteria as required. Filtered wells are tested monthly. As part of the GWR, EPA also requires reporting E. coli when found in source water (SW) monitoring. In 2023, all source water monitoring samples were E. coli-negative (no E. coli was found), except as noted in the chart below. Additional samples from these wells were total coliform-negative (no coliforms, including E. coli were found), and no sanitary deficiencies were found. In 2023, all entry points to distribution (EPTD) samples were total coliform-negative (no coliforms, including E. coli were found), except as noted in the chart below. Additional samples from these wells were total coliform-negative (no coliforms, including E. coli were found), and no sanitary deficiencies were found.

2023 Microbiological Test Results for Wells and Heterotrophic Plate Count (HPC)

Well Location	Collection Point at Pump Station	Test Results
Distribution Area 01*	SW (prior to chlorination)	Total coliform-positive, E. coli-positive
Distribution Area 15*	SW (prior to chlorination)	Total coliform-positive, E. coli-positive
Distribution Area 01*	EPTD (after chlorination)	Total coliform-positive, E. coli-negative
Distribution Area 12*	EPTD (after chlorination)	Total coliform-positive, E. coli-negative
Distribution Area 15*	EPTD (after chlorination)	Total coliform-positive, E. coli-negative
Distribution Area 30*	EPTD (after chlorination)	Total coliform-positive, E. coli-negative
Distribution Area 06*	EPTD (prior to chlorination)	Total coliform-positive, E. coli-negative
Distribution Area 12*	EPTD (prior to chlorination)	Total coliform-positive, E. coli-negative

*Please see map on pages 2 and 3 for the distribution area location.

SCWA's lab also tests every filtration system and water storage tank for total coliform and performs Heterotrophic Plate Count (HPC) measurements. Since most bacteria, including many of the bacteria associated with drinking water systems, are heterotrophs, this test can provide useful information about water quality. In 2023, the HPC results for our storage tanks were negative (no heterotrophs were found). The HPC results for our filter systems can be found in the 2023 Drinking Water Quality Report Supplement. Please see page 41 for more information on this report.

A107

MICROBIOLOGICAL TESTING AND MONITORING REQUIREMENTS

To reduce the risk of illness caused by microbial contamination the SCWA tests for total coliform bacteria, including E. coli. Total coliform bacteria are a conservative indicator of the potential for contamination from waste and provides a basis for investigation to determine and correct sanitary deficiencies. E. coli is a coliform bacteria that indicates fecal contamination and an immediate concern requiring prompt investigation. The Total Coliform Rule (TCR) and Ground Water Rule (GWR) are EPA regulations that require us to test our distribution system for total coliform bacteria. When there is a total coliform-positive result found in a distribution system sample, we are then required to test our wells in the surrounding area. This is called Triggered Source Water Monitoring. In 2023, all Triggered Source Water monitoring samples were total coliform-negative (no coliforms, including E. coli were found).

Revised Total Coliform Rule (RTCR) and Groundwater Rule (GWR) Monitoring

On April 1, 2016, the EPA revised its existing Total Coliform Rule. The revised rule (RTCR) establishes a maximum contaminant level (MCL) for E. coli and uses E. coli and total coliforms to initiate a "find and fix" approach to address fecal contamination that could enter the distribution system. It requires public water systems (PWSs) to perform assessments to identify sanitary defects and subsequently take action to correct them. In 2023, we collected an average of 906 total coliform samples each month, including samples from East Farmingdale, Riverside, Stony Brook, Dering Harbor and West Neck Water Districts. The number of samples required is based on the population in each distribution area.

Large distribution areas (greater than 40 total coliform samples collected monthly), shown in Table I below, must report the highest percentage of positive samples collected in any one month. Small distribution areas (40 or less total coliform samples collected monthly), shown in Table II below, must report the highest number of positive samples.

Revised Total Coliform Rule Level 1 & Level 2 Assessment Definitions

In 2023 we found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct an assessment (s) to identify problems and to correct any problems that were found during these assessments.

• Level 1 Assessment: A Level 1 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

• Level 2 Assessment: A Level 2 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

2023 Microbiological Test Results for Distribution

TABLE I – Microbiological Test Results
for Large Water Distribution Areas

Compound	Violation	MCL	MCLG	Unit Measure	Likely Source
Total Coliform Bacteria	Yes/No	Presence of Coliform in 5% of Monthly Samples	0	n/a	Naturally Present in the Environment
Distribution Area		**Highest Monthly Percentage Positive**	**Lowest Monthly Percentage Positive**	**Average Monthly Percentage Positive**	**No. of Tests for the Year**
1	No	0.4%	0%	0.0%	2947
10	No	2.1%	0%	0.2%	536
12	No	0.6%	0%	0.1%	1937

Distribution Areas 15 and 23 had no detections of total coliform in 2023.

TABLE II – Microbiological Test Results
for Small Water Distribution Areas

Compound	Violation	MCL	MCLG	Unit Measure	Likely Source
Total Coliform Bacteria	Yes/No	Two or More Positive Samples	0	n/a	Naturally Present in the Environment
Distribution Area		**Highest Monthly Amount Positive**	**Lowest Monthly Amount Positive**	**Average Monthly Amount Positive**	**No. of Tests for the Year**
N/A	N/A	N/A	N/A	N/A	N/A

Distribution Areas 4, 5, 6, 7, 8, 9, 11, 14, 26, 30, 32, 34, 35, 44, 53, 54, 57, 64, Stony Brook, Riverside, East Farmingdale , and West Neck Water Districts had no detections of total coliform in 2023.

A108

DISINFECTION BYPRODUCTS RULE MONITORING

The SCWA is required to use a disinfectant to reduce the potential of microbial contamination. Minute amounts of chlorine are used to prevent bacterial growth in our distribution system. Disinfectants, such as chlorine, can react with the naturally occurring components in water to form byproducts referred to as disinfection byproducts (DBPs). DBPs, if consumed in excess of the MCL over many years, may lead to increased health risks. To increase public health protection by reducing the potential risk of adverse health effects associated with DBPs from the required chlorination of our drinking water, the SCWA tests for two types of DBPs - Trihalomethanes (THMs) and Haloacetic Acids (HAAs). The MCL is 80 ppb for the sum of the four THMs, and for the sum of five HAAs the MCL is 60 ppb.

The Stage 2 Disinfectant and Disinfection Byproducts Rule (DBPR) is an EPA regulation that requires us to monitor our distribution system quarterly for four THMs (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) and five HAAs (monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid). The chart below includes the range of quarterly results for the sum of the two groups of DBPs and the highest Locational Running Annual Average as required. The SCWA also monitors the wells and storage tanks for various other DBPs, including chlorate and four additional HAAs. The 2023 disinfectant and disinfection byproducts results for each distribution area are noted on pages 17-19.

2023 Stage 2 DBPR Test Results

Detected Compound		Total Trihalomethanes				Total Haloacetic Acids			
Likely Source		Byproduct of chlorination				Byproduct of chlorination			
MCL		80				60			
MCLG		N/A				N/A			
Unit of Measure		ug/L				ug/L			
		Range of Readings				Range of Readings			
Location	Sample Site	Low Value	High Value	Annual Average	No. of Tests	Low Value	High Value	Annual Average	No. of Tests
SCWA - Zone 1	1	3.83	8.52	5.82	4	ND	2.05	0.74	4
SCWA - Zone 6	2	5.58	9.72	7.96	4	ND	2.28	0.90	4
SCWA - Zone 10	3	ND	1.42	0.45	4	ND	ND	ND	4
SCWA - Zone 12	4	1.86	27.19	16.77	4	ND	4.24	2.71	4
SCWA - Zone 1	5	8.66	15.79	12.28	4	0.86	2.86	1.98	4
SCWA - Zone 26	6	6.59	13.99	10.86	4	0.54	1.26	0.84	4
SCWA - Zone 30	7	3.25	5.71	5.02	4	0.60	0.73	0.66	4
SCWA - Zone 54	8	ND	3.51	1.67	4	ND	0.77	0.41	4
SCWA - Zone 64	9	5.24	8.40	6.69	4	ND	0.66	0.42	4
FHWD	1	ND	4.15	2.39	4	ND	4.02	1.55	4
FHWD	2	0.90	14.61	6.10	4	0.47	16.70	6.10	4
EFWD	1	0.78	2.00	1.52	4	ND	ND	ND	4
EFWD	2	2.05	4.86	2.99	4	ND	ND	ND	4
SBWD	1	ND	2.02	0.98	4	ND	ND	ND	4
SBWD	2	0.39	1.32	0.89	4	ND	ND	ND	4
RSWD	1	0.70	1.58	1.07	4	ND	ND	ND	4
RSWD	2	0.98	2.06	1.62	4	ND	ND	ND	4
WNWD	1	1.78	1.78	1.78	1	ND	ND	ND	1

Iron and Manganese

Iron is a common metal and a dietary mineral that is essential for maintaining human health. It is used in construction materials, in drinking water pipes, in paint pigments and plastics, and as a treatment for iron deficiency in humans. Iron can be elevated in drinking water in areas where there are high concentrations of iron in soil and rocks, and where iron salts are used in the water treatment process. Iron can also get into drinking water from corrosion of cast iron, steel, and galvanized iron pipes used for water distribution. Elevated levels of iron in water can result in a rusty color and sediment, a metallic taste, and reddish or orange staining.

Although iron is essential for good health, too much iron can cause adverse health effects. For example, oral exposure to very large amounts of iron can cause effects on the stomach and intestines (nausea, vomiting, diarrhea, constipation and stomach pain). These effects occur at iron exposure levels higher than those typically found in drinking water, and usually diminish once the elevated iron exposure is stopped. A small percentage of people have a condition called hemochromatosis, in which the body absorbs and stores too much iron. People with hemochromatosis may be at greater risk for health effects resulting from too much iron in the body (sometimes called “iron overload”) and should be aware of their overall iron intake. The New York State standard for iron in drinking water is 0.3 milligrams per liter, and is based on the effects of iron on the taste, odor and appearance of the water.

Manganese is a common element in rocks, soil, water, plants, and animals. Manganese occurs naturally in water after dissolving from rocks and soil. It may also occur if manganese gets into surface or groundwater after improper waste disposal in landfills or by facilities using manganese in the production of steel or other products. Manganese is an essential nutrient that is necessary to maintain good health. However, exposure to too much manganese can cause adverse health effects. There is some evidence from human studies that long-term exposure to manganese in drinking water is associated with nervous system effects in adults (e.g., weakness, stiff muscles and trembling of the hands) and children (learning and behavior). The results of these studies only suggest an effect because the possible influences of other factors were not adequately assessed. There is supporting evidence that manganese causes nervous system effects in humans from occupational studies of workers exposed to high levels of manganese in air, but the relevance of these studies to long term drinking water exposure is less clear because the exposures were quite elevated and by inhalation, not by ingestion.

Radionuclides and Radiological Monitoring

Gross Alpha and Gross Beta

Most drinking water sources have very low levels of naturally occurring radioactive elements called radionuclides. These levels are low enough not to be considered a public health concern. Radionuclides can be present in several forms called isotopes which emit different types of radioactive particles called alpha or beta. Radioactivity in water is measured in picoCuries per liter (pCi/L). The EPA has set the maximum contaminant level (MCL), the highest level allowed in drinking water, for gross alpha (all alpha emitters except uranium and radon) at 15 pCi/L. NYS considers 50 pCi/L of gross beta activity to be the level of concern for gross beta. The gross alpha and gross beta results for each distribution area are noted on page 33.

Tritium

Some radionuclides emit gamma (also called photon) radiation. Common byproducts from nuclear reactors and waste, such as cesium-137, emit gamma radiation (also called photon emitters). Due to differences in energy levels, the MCL in pCi/L for a particular photon emitter will depend on the type of radionuclide present. Tritium, a radioactive isotope of the element hydrogen, is a weak beta emitter. It occurs naturally in the environment in very low concentrations, and may also be produced during nuclear weapon explosions and as a byproduct from nuclear reactors. The EPA has set a 20,000 pCi/L MCL for tritium. In 2023 we monitored 30 wells near Brookhaven National Laboratory for gross alpha and beta particles, tritium, and gamma radiation. These wells are located in distribution areas 1 and 12. The gross alpha and gross beta results for these areas are listed in the chart on page 33. There were no detections of tritium or gamma radiation in the 54 samples tested.

Radium-226 and Radium-228

Radium, a naturally radioactive metal, occurs at very low levels in virtually all rock, soil, water, plants, and animals. Radium-226 and radium-228 are isotopes of radium. The EPA has set a combined MCL of 5 pCi/L for radium-226 and radium-228. If radium-226 is not tested, the gross alpha measurement is substituted for radium-226 to determine compliance with the MCL. Some people who drink water containing radium-226 or radium-228 in excess of the MCL over many years may have an increased risk of cancer.

From October 2007 through 2009, we monitored a well in each aquifer at all our well fields for gross alpha, gross beta and radium-228 as required, and presented the results for each year in our Drinking Water Quality Reports. Since that time, quarterly monitoring at new well fields or at new wells placed at a well field where the aquifer had not been monitored previously and continuing monitoring on existing wells as required has been performed. The results for each distribution area are noted in the chart on page 33.

RADIOLOGICAL TEST RESULTS (ALL DISTRIBUTION AREAS)

Radon, a naturally occurring radioactive gas found in soil and outdoor air, may also be found in drinking water and indoor air. Some people exposed to elevated radon levels from sources including drinking water may, over many years, have an increased risk of developing cancer. The main risk from radon is lung cancer entering indoor air from soil under homes. For further information, call the state radon program at (800) 458-1158 or call the EPA's Radon Hotline at (800) SOS-Radon.

In 2023 we monitored for radon at 81 locations throughout our distribution system. The results for each distribution area are noted in the chart below. The test results ranged from ND to 247 pCi/L of radon. Currently there is no MCL for radon. The EPA is proposing to require water suppliers to provide water with levels no higher than 4,000 pCi/L of radon.

Detected Compound	GROSS ALPHA				GROSS BETA				RADON-222				RADIUM-226				RADIUM-228			
Likely Source	Erosion of Natural Deposits				Natural deposits, man-made emissions				Naturally occurring radioactive gas				Erosion of Natural Deposits				Erosion of Natural Deposits			
MCL	15				50				N/A				5				5			
MCLG	0				0				0				0				0			
Unit of Measure	pCi/L				pCi/L				pCi/L				pCi/L				pCi/L			
	Range of Readings				Range of Readings				Range of Readings				Range of Readings				Range of Readings			
Distribution Area	Low Value	High Value	Average Value	No. of Tests	Low Value	High Value	Average Value	No. of Tests	Low Value	High Value	Average Value	No. of Tests	Low Value	High Value	Average Value	No. of Tests	Low Value	High Value	Average Value	No. of Tests
1	ND	ND	ND	52	ND	3.83	ND	52	ND	117	ND	16	ND	ND	ND	8	ND	1.26	ND	8
4	ND	ND	ND	2	ND	ND	ND	2	ND	ND	ND	1	ND	ND	ND	1	ND	ND	ND	1
5	2.12	2.12	2.12	1	2.01	2.01	2.01	1	127	127	127	1	NA	NA	NA	0	NA	NA	NA	0
6	ND	ND	ND	3	ND	ND	ND	3	ND	177	175.5	2	ND	ND	ND	1	ND	ND	ND	1
7	ND	ND	ND	2	ND	7.22	4.11	2	ND	ND	ND	1	ND	ND	ND	1	1.12	1.12	1.12	1
8	ND	ND	ND	2	ND	ND	ND	2	ND	ND	ND	1	ND	ND	ND	1	ND	ND	ND	1
9	ND	2.77	ND	5	ND	ND	ND	5	ND	ND	ND	2	ND	ND	ND	3	ND	ND	ND	3
10	ND	ND	ND	5	ND	4.54	2.04	5	ND	ND	ND	2	ND	ND	ND	3	ND	1.78	ND	3
11	ND	2.30	ND	13	ND	3.42	2.42	13	ND	ND	ND	2	ND	1.27	ND	11	ND	2.04	ND	11
12	ND	ND	ND	47	ND	3.85	ND	47	ND	162	ND	13	ND	ND	ND	15	ND	ND	ND	15
14	ND	ND	ND	3	ND	ND	ND	3	ND	ND	ND	2	ND	ND	ND	1	ND	ND	ND	1
15	ND	2.58	ND	16	ND	3.30	ND	16	ND	120	ND	6	ND	1.28	ND	10	ND	ND	ND	10
23	ND	ND	ND	15	ND	2.48	ND	15	ND	111	ND	5	ND	ND	ND	10	ND	1.32	ND	10
26	ND	ND	ND	3	ND	ND	ND	3	ND	247	115.7	3	NA	NA	NA	0	NA	NA	NA	0
30	ND	ND	ND	4	ND	2.05	ND	4	ND	ND	ND	3	ND	ND	ND	1	ND	ND	ND	1
32	ND	ND	ND	2	ND	ND	ND	2	ND	ND	ND	1	ND	ND	ND	1	ND	ND	ND	1
34	ND	ND	ND	2	ND	ND	ND	2	196	196	196	1	ND	ND	ND	1	ND	ND	ND	1
35	ND	ND	ND	1	ND	ND	ND	1	ND	ND	ND	1	ND	ND	ND	1	ND	ND	ND	1
44	ND	ND	ND	1	3.21	3.21	3.21	1	ND	ND	ND	1	NA	NA	NA	0	NA	NA	NA	0
53	ND	ND	ND	7	ND	3.80	2.48	7	ND	ND	ND	4	ND	ND	ND	3	ND	ND	ND	3
54	ND	ND	ND	6	ND	2.26	ND	6	ND	ND	ND	5	ND	ND	ND	1	ND	ND	ND	1
57	ND	ND	ND	1	ND	ND	ND	1	ND	ND	ND	1	ND	ND	ND	1	ND	ND	ND	1
64	1.54	1.54	1.54	1	ND	ND	ND	1	ND	ND	ND	1	NA	NA	NA	0	NA	NA	NA	0
EFWD	ND	ND	ND	2	ND	ND	ND	2	ND	ND	ND	2	NA	NA	NA	0	NA	NA	NA	0
RSWD	ND	ND	ND	1	ND	ND	ND	1	ND	ND	ND	1	NA	NA	NA	0	NA	NA	NA	0
SBWD	ND	ND	ND	2	ND	ND	ND	2	ND	104	ND	2	NA	NA	NA	0	NA	NA	NA	0
WNWD	ND	ND	ND	1	2.13	2.13	2.13	1	137	137	137	1	NA	NA	NA	0	NA	NA	NA	0

Asbestos Monitoring

Asbestos-cement water mains are made from cement with asbestos fibers added to make the pipes strong. Although drinking water can pass through these pipes without becoming contaminated with asbestos fibers, asbestos fibers may be released through the wear or breakdown of these mains; erosion of natural deposits. The EPA has set the maximum contaminant level (MCL) for asbestos at 7.0 million fibers per liter (MFL). Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps. Although testing is required every nine years, the SCWA tests every year.

In 2023 we monitored 18 sampling station locations where asbestos-cement pipes exist and 5 production wells. All locations were non-detect (no asbestos fibers were present).

A111

MAXIMUM CONTAMINANT LEVEL DEFERRALS

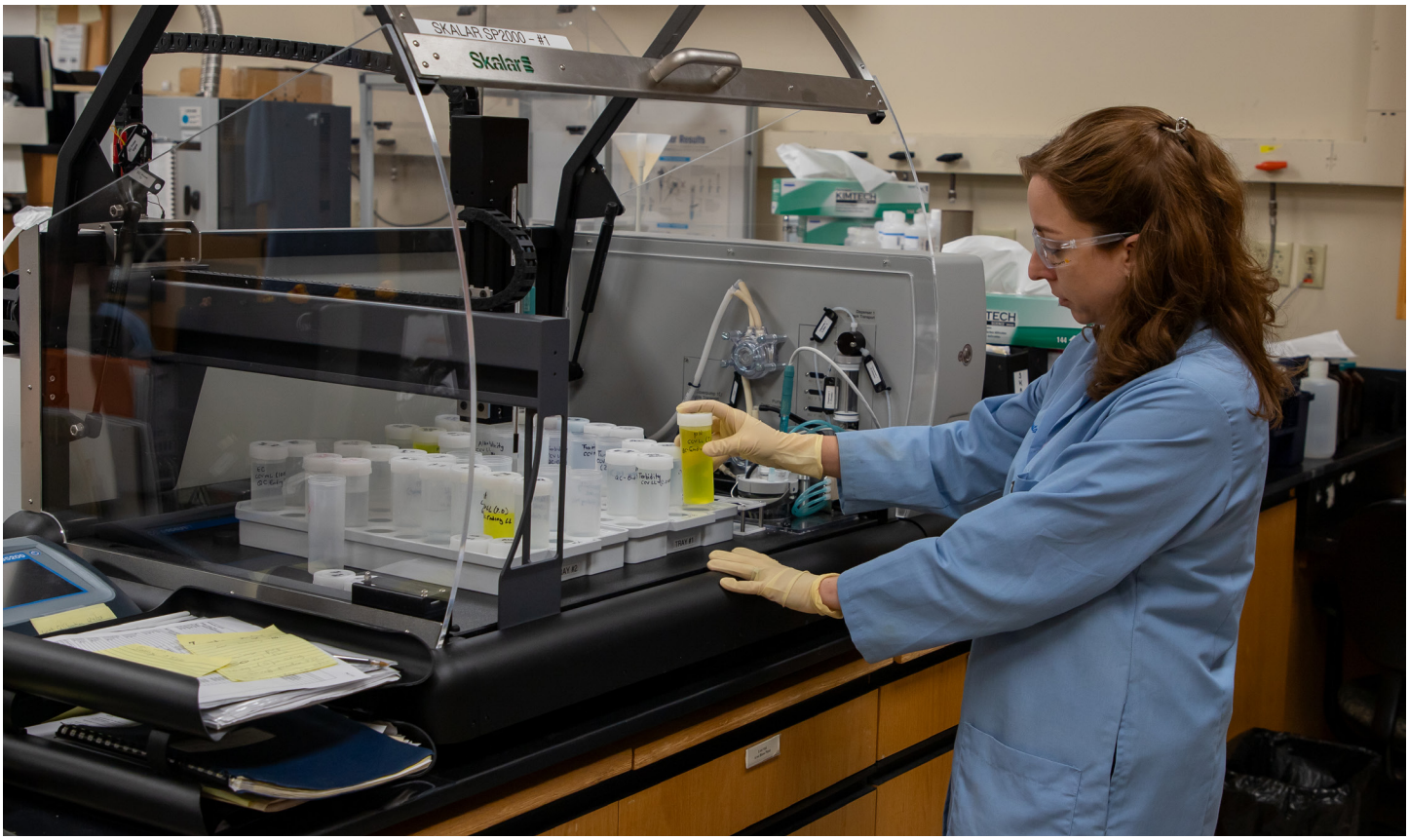
PFOS, PFOA and 1,4-Dioxane

When a public water system (PWS) is issued a deferral, the water system agrees to a schedule for corrective action and compliance with the new PFOS, PFOA or 1,4-dioxane MCLs. In exchange, the New York State Department of Health (the Department) agrees to defer enforcement actions, such as assessing fines, if the PWS is meeting established deadlines. Deferral recipients are required to update the Department and the Suffolk County Department of Health Services each calendar quarter on the status of established deadlines. The Department can resume enforcement if the agreed upon deadlines are not met. Information about our deferral and established deadline can be found at the following site:
https://www.scwa.com/emerging-contaminants/

What is being done to remove these contaminants?

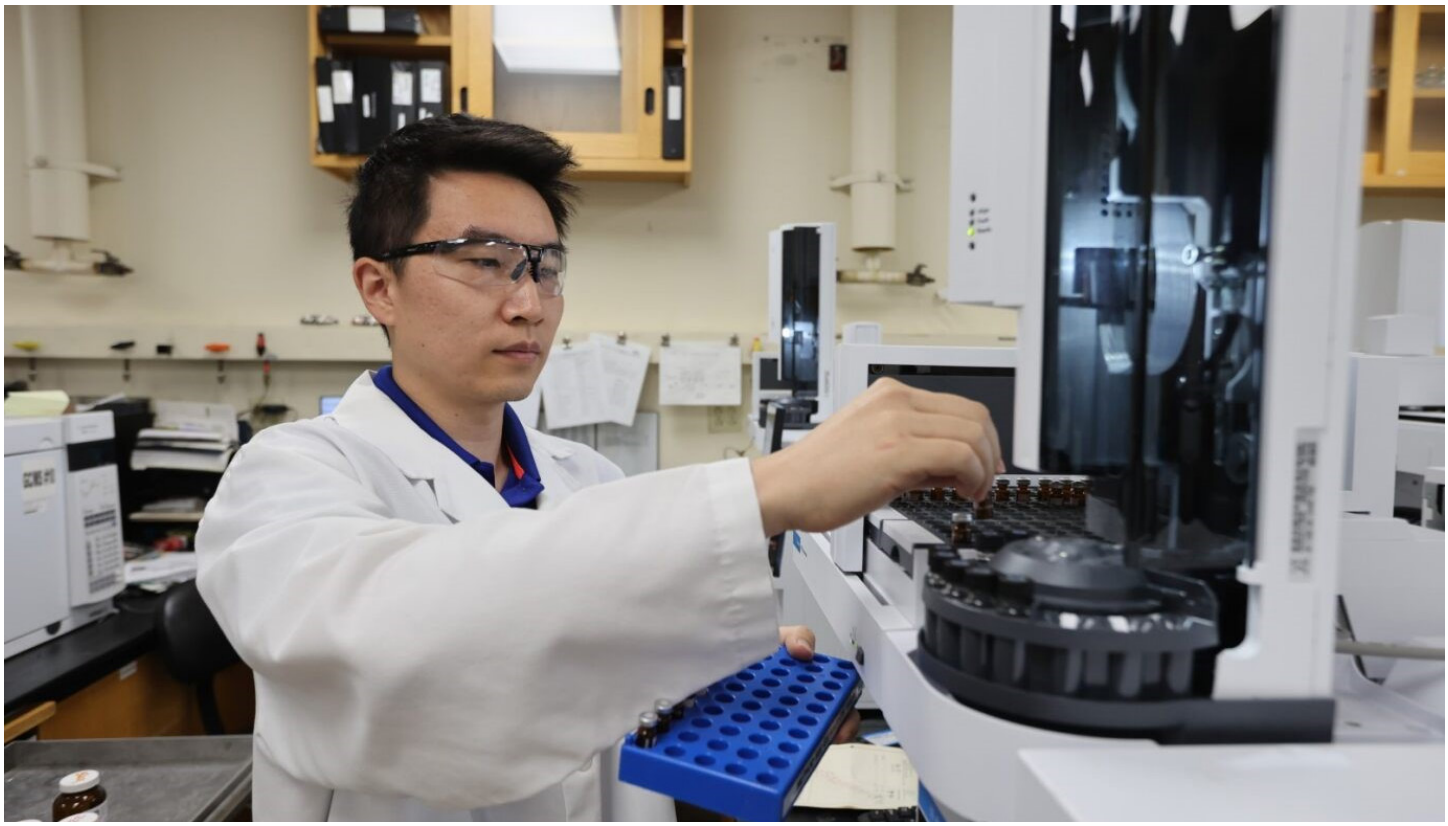
SCWA is installing granular activated carbon treatment systems at impacted wells to remove PFOA and PFOS and advanced oxidation process systems to remove 1,4-dioxane. In the interim, SCWA will make every effort to operationally minimize the concentration of 1,4-dioxane, PFOA and PFOS in the distribution system at any given time. Additional information will be shared monthly on our website at www.scwa.com as further testing and progress occurs. This process is similar for any chemical detected in public drinking water that requires mitigation. The compliance timetable will ensure that your drinking water will meet the MCL as rapidly as possible. As of August 25, 2022, the SCWA has not applied for a one-year deferral extension for PFOA and PFOS. Treatment has been installed at impacted wells and are currently meeting or surpassing all federal and state standards. SCWA applied for a final one-year extension for 1,4-dioxane that expired August 25, 2023. Since then we have completed the requirements for the deferral and are in compliance with the MCL for PFOA,PFOS, and 1,4 Dioxane.

Residents of the Town of Southold are advised that SCWA purchases wholesale water from the Riverhead Water District (RWD) for resale to our Southold customers and that the RWD has also been issued a deferral by the New York State Department of Health for PFOA and PFOS. SCWA's Southold customers may view information on the RWD deferral and steps the district is taking in order to comply by visiting their website at: https://www.townofriverheadny.gov/pview.aspx?id=2492&catID=118



A112

WATER QUALITY DATA BY DISTRIBUTION AREA



2023 Nitrosamine Test Results for Distribution Area 12*

One well in Distribution Area 12 has nitrosamines. Currently granular activated carbon (GAC) treatment is being used at these wells for nitrosamine removal. Nitrosamines can be formed by a byproduct of the disinfection of drinking water or found as a contaminant in drinking water from manufacturing processes such as for rubber and latex products. Additionally, nitrosamines are found in tobacco smoke, cosmetics and food products such as cured meats and fish, beer and smoked products, and they also form in the body from the nitrosation of dietary amines. The EPA has classififed several nitrosamines as probable carcinogens, but has not set an MCL. The nitrosamines were measured at extremely low levels, in parts per trillion or ppt. A summary of the 2023 test results for Distribution Area 12 is shown in the chart below.

Detected Compounds	Unit of Measure	Low Value	High Value	Average Value	No. of Tests
N-Nitrosomorpholine	ppt	ND	2.7	ND	11

** Please see map on pages 2 and 3 for the location of Distribution Area 12*

2023 AOP Byproduct Test Results for Distribution Areas 5, 6, 7, 9 and 12

At wells located in Distribution Areas 5, 6, 7, 9 and 12 the Suffolk County Water Authority utilizes an AOP (Advanced Oxidation Process) to treat for an emerging contaminant, 1,4-Dioxane. The New York State Department of Health required the SCWA to perform additional testing for specific Aldehydes and Carboxylic Acids. These compounds are potential by-products of the treatment process and are indicators of the effectiveness of the AOP system. There were no positives detected in 2023.

A113

NITRATE & SPECIAL INFORMATION FOR IMMUNO-COMPROMISED INDIVIDUALS

Nitrate naturally occurs in a number of foods, particularly vegetables. It is also used as preservatives in meats such as bacon. Nitrate is also used to make lawn, garden and agricultural fertilizers and is found in sewage and wastes from farm animals. It generally gets into drinking water by runoff into surface water or by leaching into groundwater after application or after improper sewage or animal waste disposal. Infants are particularly sensitive to nitrate. High levels of nitrate in drinking water have caused serious illness and sometimes death in infants under 6 months of age. The serious illness occurs because nitrate is converted to nitrite in the body and nitrite reduces the ability of the infant's blood to carry oxygen. Symptoms of the illness can develop rapidly and include shortness of breath and blueness of the skin (blue baby condition). Exposure to nitrate in drinking water at levels above 10 milligrams per liter (10 mg/L) increases the risk of developing the illness. Because the effects of nitrate and nitrite are additive, water containing more than 10 mg/L of total nitrate/nitrite should not be used to prepare infant formula or other beverages for infants. To ensure the quality of our drinking water, we monitor more frequently than required. The 2023 nitrate results for each distribution area are noted on pages 20-28.

SPECIAL INFORMATION FOR IMMUNO-COMPROMISED INDIVIDUALS

Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbiological contaminants are available from the EPA's Safe Drinking Water Hotline at (800) 426-4791. Individuals who think they may have cryptosporidiosis or giardiasis should contact their health care providers immediately. New York State law requires water suppliers to notify their customers about the risks of cryptosporidiosis and giardiasis. Cryptosporidiosis and giardiasis are intestinal illnesses caused by microscopic parasites found in surface water and groundwater under the influence of surface water. There have been no known outbreaks of cryptosporidiosis or giardiasis linked to any public water supplies in Suffolk County. For more information on cryptosporidiosis and giardiasis, please contact the Suffolk County Department of Health Services at (631) 852-5810.

GO GREEN: SIGN UP FOR E-BILLING TODAY!

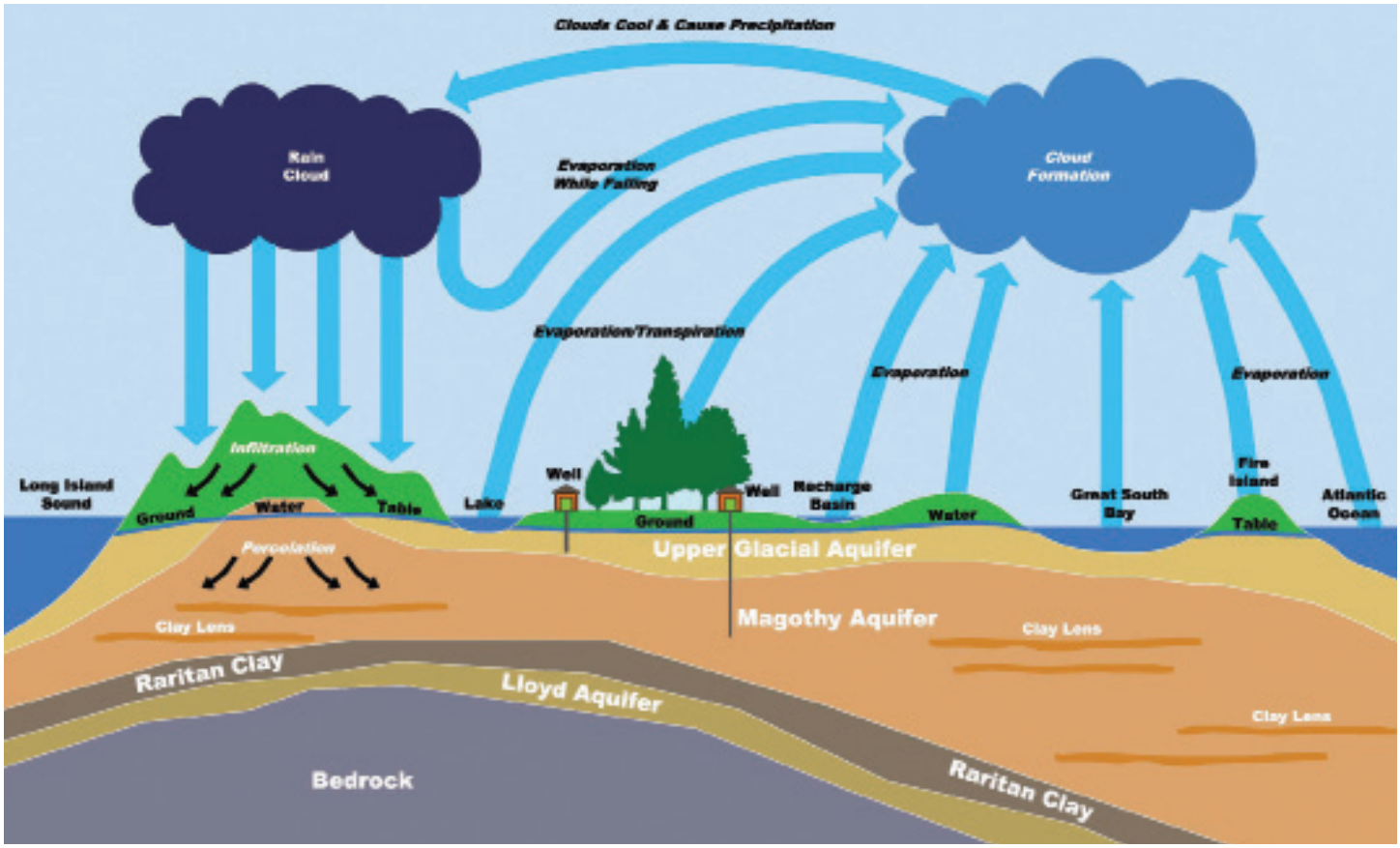
Even when you're paying bills, you can be helping the environment. The Suffolk County Water Authority now offers e-Billing, a quick, easy and environmentally-friendly way to pay your water bill.

With e-Billing, you can manage various aspects of your water account without leaving a paper trail. You can receive your bill electronically; set up automated payments from your checking or savings account; make a one-time payment; and view your current and past bills online.

For more information or to sign up, go to www.scwa.com

A114

THE WATER CYCLE ON LONG ISLAND



In general, the sources of drinking water (both tap water and bottled water) can include rivers, lakes, streams, ponds, reservoirs, springs, and aquifers. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activities. Contaminants that may be present in source water include: microbial contaminants, inorganic contaminants, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants.

All of the water we supply to you comes from beneath the ground and is referred to as groundwater. The water is stored beneath the ground in a sandy, geological formation known as the aquifer system. Water in the aquifer system originates as precipitation (such as rain and snow), which slowly percolates down through the soil and into the aquifers.

The total depth of the Long Island aquifer system is shallowest on the north shore (approximately 600 feet) and deepest along the south shore (approximately 2,000 feet).

There are four primary formations which are layered, and make up the Long Island Aquifer System. From the shallowest to the deepest, these formations are:

Upper Glacial Aquifer — contains the newest water to the groundwater system. The Water Authority has 282 wells drawing from this portion of the aquifer. Virtually all private wells draw from the Glacial Aquifer.

Magothy Aquifer — is the largest of the three formations and holds the most water, much of which is hundreds of years old. There are 350 SCWA wells drawing from this portion of the aquifer.

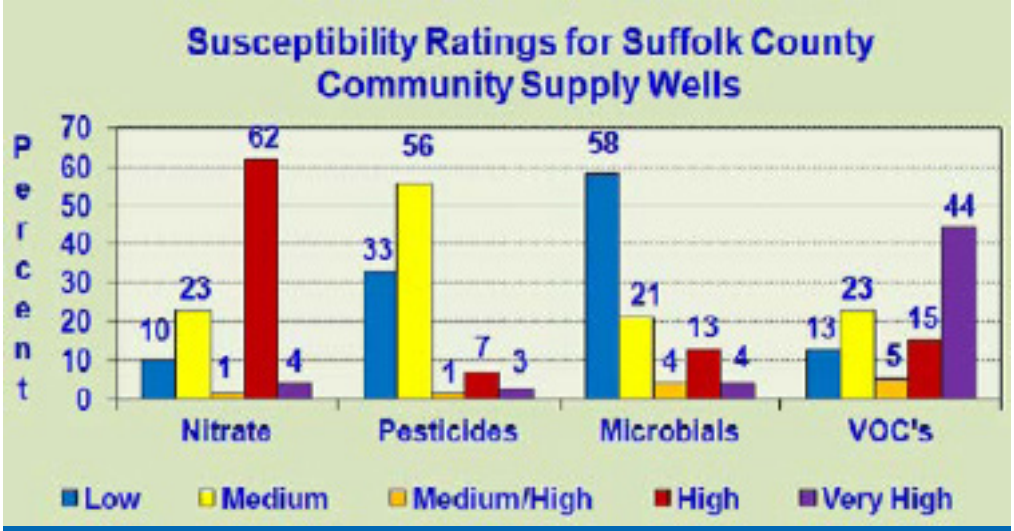
Raritan Clay — is a clay layer that separates the Magothy and Lloyd Aquifers. Some portions of the Raritan contain permeable, sandy formations that hold enough water to pump from. The SCWA has 3 wells in the Raritan.

Lloyd Aquifer — is a largely-untapped layer which contains the oldest water, some of which has been held in the Aquifer System for more than 5,000 years. The SCWA has 3 Lloyd wells.

A115

SOURCE WATER ASSESSMENT SUMMARY REPORT

The federal Safe Drinking Water Act (SDWA) amendments of 1996 created a Source Water Assessment Program (SWAP) to evaluate existing and potential threats to the quality of public drinking water supplies throughout the U.S. To carry out this program in New York, the Bureau of Water Supply Protection of the New York State Department of Health (NYSDOH) developed the New York State SWAP plan, with input from a variety of interested parties. Source water assessments were performed for all public water supplies in Nassau and Suffolk Counties, in accordance with the final New York State SWAP plan prepared by the NYSDOH and approved by the U.S. Environmental Protection Agency (EPA) in November 1999. The chart above and summary below apply to **all** Suffolk County community supply wells.



Summary chart of susceptibility ratings for Suffolk County community supply wells show the majority of wells having high susceptibility for nitrate, medium susceptibility for pesticides, low susceptibility for microbials and very high susceptibility for VOCs.

It is important to remember that the source water assessments only indicate the **potential** for contamination of a supply well, based upon the likelihood of the presence of contaminants above ground in the source water recharge area and upon the **possibility** that any contaminants present can migrate down through the aquifer to the depth at which water enters the well screen. In most cases, the susceptibility, or potential, for contamination **has not** resulted in actual source water contamination. If contamination of a well source is identified, the Suffolk County Water Authority can either provide treatment or withdraw the well from service, so that all applicable drinking water standards are met.

Nitrate

Almost 70 percent of Suffolk County community supply wells were rated as high, or very high, for susceptibility to nitrate, with the lower population density accounting for reduced contaminant prevalence ratings in the central and eastern parts of the county.

Pesticides

The susceptibility of approximately 10 percent of community supply wells were rated medium-high, high, or very high for pesticides, largely where significant tracts of agricultural land exist in eastern Suffolk County.

Microbials

Almost 60 percent of community supply wells in Suffolk County have a low susceptibility to contamination by microbials. Over 20 percent of the community supply wells were rated medium-high, high, or very high for microbials. This is a result of the presence of microbial sources in unsewered areas and the relatively short travel times from the water table to shallow well screens, particularly in the central and eastern parts of the county.

Volatile Organic Chemicals (VOCs)

Almost 65 percent of the community supply wells in Suffolk County have susceptibility ratings of medium high, high or very high for VOCs, while over 35 percent of the wells are rated medium or low. If you would like detailed information regarding the source water assessment results for the source water that is supplied to your distribution area, please contact our laboratory at (631) 218-1112.

A116

SOURCE WATER PROTECTION

To ensure that Suffolk residents will continue to have a high quality source of drinking water, our groundwater, the SCWA is at the forefront of aquifer protection measures. Maintaining, safeguarding, and improving the quality of our groundwater are critical for our public health, our economy and our environment. Source water protection also helps avoid costs associated with treating, monitoring and remediating contamination. Pollution prevention is always preferable to remediation.

Open Space Preservation

SCWA took a very active leadership role in working towards the enactment of the legislation that protected the Central Pine Barrens. This legislation has resulted in the preservation of more than 100,000 acres of land in central Suffolk, which overlies one portion of Long Island's federally designated sole source aquifer. We continue to provide resources to protect this unique resource.

Hydrological Research

We have partnered with the Long Island Groundwater Research Institute (LIGRI) at SUNY Stony Brook to study groundwater hydrology and chemistry, and the impacts that certain practices have on our groundwater quality and quantity. The focus of this scientific research is Long Island's aquifer system, and the goal is to utilize the results in practical applications to resolve groundwater related problems.

We also support local research and data collection by the United States Geological Survey (USGS) to assess the water quality and quantity of Suffolk's groundwater reservoir. The USGS performs on-going environmental and hydrologic surveillance and investigations including a long-term groundwater monitoring program, data collection on emerging contaminants and nitrate trends, geophysical surveys, and aquifer characterization. The USGS also maintains a database of this information, allowing for trend analyses.

Public Education and Outreach

Public education is an essential ingredient in maintaining the quality of our water resources. We provide an educational outreach program for students in the 4th through 8th grades that covers the water cycle and protection of our drinking water. We also have useful information on our website (scwa.com), in our Annual Report, and in billing inserts. Occasionally SCWA will distribute information to the public through newspaper ads, TV and radio announcements, and posters or plaques on our vehicles.

Additionally, group tours of our state-of-the-art water quality testing laboratory or one of our pump stations can be arranged, or we'll gladly make a special presentation to your civic organization.

The SCWA would like you to take an active part in preserving our local water supply by becoming a Groundwater Guardian.

The Groundwater Guardian program, an international effort by the Groundwater Foundation to educate the public about the nature and value of groundwater, is run locally by a group of dedicated individuals representing government, the business community, education, agriculture, and Suffolk citizens. The SCWA recently rejuvenated the program in Suffolk with the help of these local leaders, and is looking for volunteers to help raise awareness about the importance of preserving our groundwater. Potential public education campaigns may include poster and video contests in schools and the creation of a Suffolk County Groundwater Guardians website, among other efforts.

What You Can Do to Protect our Groundwater

- ***Don't pour any hazardous or toxic household materials down the drain or toilet - old paint, cleaners, degreasers, oils, etc.***
- ***Properly dispose of all expired or unused medications by dropping them off at your local Suffolk County police department precinct's drop box, available 24 hours a day, 7 days a week.***
- ***If you use any chemicals on your lawn and gardens (pesticides, herbicides, and fertilizers) do so sparingly. In this case, more is not better.***
- ***Don't overwater your lawn during the summer. Instead, irrigate less frequently and for longer durations to promote deep root growth and reduce runoff of any chemicals into the groundwater.***
- ***Support open space preservation initiatives in your community.***

For further information, visit our website at www.scwa.com

A117

SOURCE WATER PROTECTION

The Value of Water

How often do you think about the value of your tap water? And yet it provides many things that no other water can.

- *It delivers public health.*
- *It delivers fire protection.*
- *It delivers economic development.*
- *It delivers quality of life.*

Water services are delivered to you 24/7/365. A day without water can mean:

- *No drinking, flushing or brushing.*
- *No showers, laundry, or dish washing.*
- *No putting out fires or watering lawns and gardens.*
- *Increased risk of waterborne diseases.*

Drinking water services are not free. Tap water costs less than a penny per gallon – a true bargain considering the energy and expertise it takes to treat and deliver clean and reliable water to homes and businesses day in and day out. But like many basic services, the cost of treating and delivering water is going up for several reasons:

Rising treatment costs – increasingly stringent drinking water regulations add to the cost of providing water.

Aging water infrastructure – repairing and upgrading aging pipelines, pumps and other facilities accounts for a significant portion of your water bill.

Increasing energy costs – it takes a lot of electricity to pump, treat and deliver water. Rising costs for energy directly affect the cost of delivering water to you.

Cost of developing new supplies – water bills reflect the cost of developing new wells and well fields to meet peak demand periods.

Our customers get more than just a product for their money. We provide reliable service that includes ongoing maintenance, sophisticated water quality testing and treatment, and highly trained personnel. Simply put, it is one of the best deals around. To learn more, please visit our website at https://www.scwa.com/water-quality/environment/

Conserving Water

In many parts of the U.S. water conservation is about reducing consumption to maximize a limited resource. Here in Suffolk County it isn't a matter of limited quantity, but rather a matter of using our precious natural resource efficiently. Although we have a sufficient water supply to meet present and future demands if managed properly, there are many reasons why conserving is important. Conserving water reduces the amount of electricity we use to run our wells. It reduces the need to construct new wells, water mains and tanks to meet increased demand. It ensures that there will be sufficient water pressure during peak demand periods to fight fires. Conserving water saves money and ensures that there will be an adequate supply for future generations.

Indoor Water Efficiency

Install Water-Conserving Appliances and Fixtures - They are cost effective and can greatly reduce water use. The average home, retrofitted with water-efficient fixtures, can save 30,000 gallons per year. Installing an aerator on your faucet is one of the most cost effective means to use water more wisely in your home. You can increase the faucet's efficiency by 30% without decreasing its performance. Check for EPA's WaterSense® label when purchasing new appliances and fixtures.

Fix Leaks - Check for leaky faucets and toilets. An American home can waste, on average, more than 10,000 gallons of water every year due to running toilets, dripping faucets, and other household leaks.

Don't Let Water Run - Turning off the tap while brushing teeth, shaving, and soaping hands can save gallons a day.

Fill it Up - When running the clothes washer or dishwasher, always wash full loads.

Outdoor Water Efficiency

Irrigate Properly - Install a weather-based "Smart" irrigation controller which will ensure your irrigation system only operates when it needs to. Set timers properly and install rain shut-off devices and moisture sensors, if one isn't built in, to reduce excess watering. Regularly inspect the sprinkler heads to make sure they are not malfunctioning. Adjust sprinklers so they are not spraying water on paved surfaces such as the sidewalk, driveway, or road. These steps will also save you energy.

Choose Low-Maintenance Lawns - Consider using native ground cover that requires little water in place of lawn areas.

Mulch – Use mulch to prevent water loss through evaporation. It helps keep your soil moist.

Sweep vs. Hose - Sweep outdoor surfaces with a broom instead of using a hose.

Go to the Car Wash - Wash your vehicle at a car wash that recycles its water rather than doing it yourself.

A118

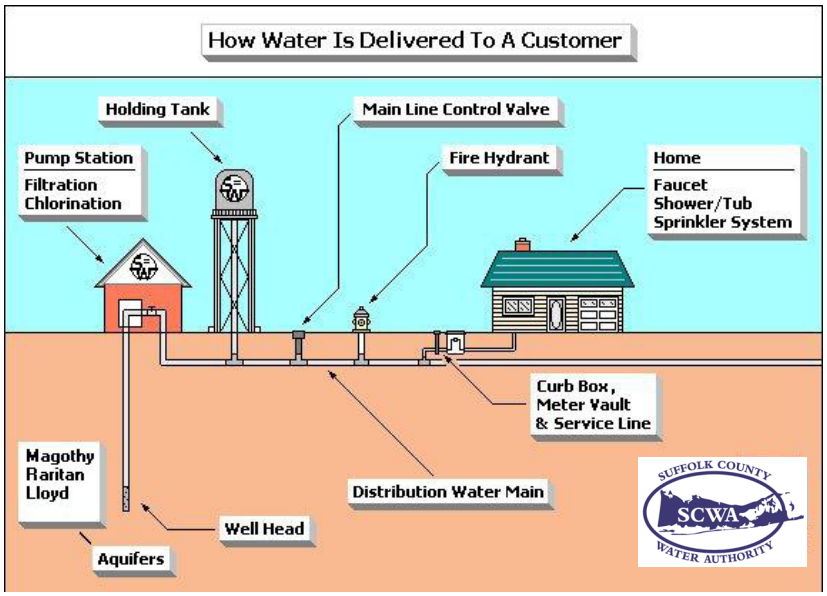
HOW SCWA ENSURES THE QUALITY OF YOUR WATER

We Would Like You To Know

Drinking water, including bottled water*, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Water quality standards are established based upon the known health risks of the contaminants involved. In order to ensure the tap water we provide to you is the highest quality, New York State and the EPA prescribe regulations that limit the amount of certain contaminants in drinking water provided in public water systems. These limits are called Maximum Contaminant Levels (MCLs). More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791)

*As a point of information, the State Health Department's and the Federal Food and Drug Administration's regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

This graphic illustrates how your drinking water is delivered to you. SCWA pump stations are located throughout Suffolk County. There may be only one or several wells located at each pump station. At these sites, the groundwater is pumped out of the aquifer. This water prior to treatment is usually referred to as "raw" water. In some cases, the raw water is filtered to remove contaminants. Before leaving the pump station, all raw water is treated to increase the pH and chlorinated to maintain disinfection throughout the distribution system. The distribution system connects the wells to your home or business. It consists of the water mains, fire hydrants, and storage tanks. Additional information about our water treatment can be found on page 43, and a description of our distribution system can be found on page 2.



DRINKING WATER QUALITY REPORT SUPPLEMENT

Additional information regarding your water supply is available in our Drinking Water Quality Report Supplement. This Supplement contains water quality data for our wells from samples that were collected before treatment and prior to being pumped to our customers. This Supplement is available to you by accessing our website at **www.scwa.com** and looking for "Water Quality Reports" under "Public Information".

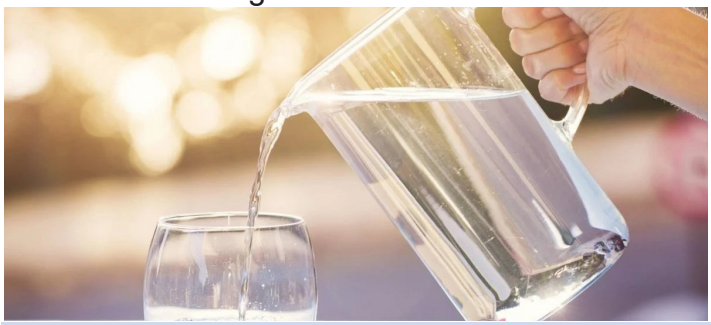
The Supplemental Report contains raw water quality information from each of our well fields. The range of data presented shows the lowest value for a detected analyte, the highest value, the average value, and the total number of tests at each well field. These values represent an average of the individual wells at each well field.

A119

SCWA STATISTICS AND WELL INFORMATION

How Much Water Did We Supply in 2023?

In 2023, we pumped 71.2 billion gallons of water. Of that total, 90.4% was used to meet the demands of our customers and 1.4% was used for flushing water mains, firefighting, street cleaning and other purposes. The remaining 8.2% represents water loss and is attributed to main breaks, leaks and unauthorized usage.



SCWA Statistics for Calendar Year Ended December 31, 2023

Customers	393,074
Population Served	1,179,222
Miles of Main	6,072
Fire Hydrants	36,285
Water Pumped (billion gallons)	71.2
Total Wells in System	639
Active Wells in System	584
Pump Stations	242
Storage Facilities	69
Water Storage Capacity (million gallons)	73.6
Average Annual Water Rates (166,424 gallons/customer)	$620

Wells Placed in Service in 2023

In 2023, we added four new wells to our water system and replaced two wells. In addition, this table lists the twelve wells placed in service with treatment to remove the contaminant(s) noted.

Well Name(s)	Location	Contaminant(s)	Treatment Type
Blue Point Rd #1	Holtsville	PFC's/Chlorodane	GAC Filtration
Douglas Ave #1	Northport	1,4 Dioxane	Advanced Oxidation Process
Douglas Ave #2	Northport	1,4 Dioxane	Advanced Oxidation Process
Flower Hill Rd #1	Halesite	1,4 Dioxane	Advanced Oxidation Process
Flower Hill Rd #2	Halesite	1,4 Dioxane	Advanced Oxidation Process
Flower Hill Rd #3	Halesite	1,4 Dioxane	Advanced Oxidation Process
Hollywood Pl #1	Huntington Station	1,4 Dioxane	Advanced Oxidation Process
Lawrence Ave #2	Kings Park	1,4 Dioxane/VOC's	AOP/GAC Filtration
Liberty Ave #2	Hauppauge	PFC's	GAC Filtration
Mckay Rd #1	Huntington	1,4 Dioxane	Advanced Oxidation Process
Old Country Rd #1A	Westhampton	PFC's	GAC Filtration
Strathmore Ct #3	Coram	PFC's/Tetrachloroethene	GAC Filtration
Waterside Rd #2	Northport	PFC's	Advanced Oxidation Process

Wells Taken Out of Service in 2023

In 2023, we retired two wells. In addition, the five wells listed in this table were removed from service because they had elevated levels of the contaminant(s) noted.

Well Name(s)	Location	Contaminant(s)	Well Name(s)	Location	Contaminant(s)
Belmore Ave #1	Great River	Well Screen Failure	Pleasant Ave #4	Centereach	Tetrachloroethene
Meehan Ln #2	Coram	Nitrates	Station Rd #3	North Bellport	PFC's
Peconic St LK #2	Lakeland	1,4 Dioxane			

WATER TREATMENT INFORMATION

As most of our groundwater already meets all state and federal water quality standards, it generally does not receive extensive treatment. Before the water leaves the pump station, minute traces of chlorine are routinely added according to the specifications of the state health department to prevent bacterial growth that could occur in our water mains and tanks. Our bacteriological test results can be found on pages 29 and 30. Information regarding the disinfection byproducts formed from the addition of chlorine can be found on pages 17 - 19.

We also adjust the pH level of the water we deliver to you because the water, which we pump from the ground, is naturally acidic (pH can range from 4.5 to 6.8). To prevent corrosion of home plumbing, our water is chemically "buffered" by adding a hydrated lime product to increase the pH level. Soda ash is sometimes used instead of hydrated lime in certain portions of our system. This greatly reduces or eliminates the leaching of lead and copper from customers' interior plumbing. Our test results for lead and copper can be found on page 19.


Typical Pump Station with Elevated Storage Tank


Iron and Manganese Removal Filters

In areas where the groundwater naturally contains iron or manganese levels higher than the standard, sequestering agents such as polyphosphates may be added to control the iron and keep it in solution. We also use specialized iron and manganese removal filters, and employ strategies such as systematic flushing of water mains to reduce these naturally occurring metals. If any well exceeds the standard and does not have treatment, it is removed from service.

Approximately 31% of our wells receive treatment using granular activated carbon filtration to remove pesticides/herbicides, per- and polyfluoroalkyl substances such as PFOA/PFOS, and volatile organic compounds. Packed Tower Aeration (PTA) units also called air strippers, ion exchange, perchlorate resin filters and Advanced Oxidation Process (AOP) are also used as needed. In some cases wells are blended together at the pump station to lower the amount of contaminants, such as nitrate and 1,4-Dioxane, in the water we serve.


Ion Exchange Filters for Nitrate Removal


Granular Activated Carbon


Advanced Oxidation Process

A121

SCWA Completes Eight New Advanced Treatment Systems in Town Of Huntington

Suffolk County Water Authority Completes Eight New Advanced Treatment Systems in Town of Huntington

August 24, 2023 01:43 PM

The Suffolk County Water Authority (SCWA) announced that it recently completed eight new Advanced Oxidation Process (AOP) water treatment systems throughout the Town of Huntington. These state-of-the-art treatment systems are specifically designed to remove the emerging contaminant 1,4-dioxane from the SCWA supplied drinking water. SCWA worked to install them ahead of a state regulatory deadline on August 25th, ensuring that customers continue to have access to high quality drinking water.

SCWA Brings High Quality Water to Over 100 Manorville Homes

Suffolk County Water Authority Brings High Quality Water to Over 100 Manorville Homes

February 29, 2024 02:49 PM

At a press conference held at the home of one of its newest customers, the Suffolk County Water Authority announced the completion of a substantial water main extension project in Manorville, which makes high quality public water available to more than 100 homes. This is the culmination of a year's long effort by residents in the community, elected officials and SCWA to expand public water to this area. These homes previously sourced their water from private wells that were threatened by contaminants such as PFAS. Now that they are connected to the SCWA's infrastructure, these homeowners and their families will benefit from the state-of-the-art water treatment and distribution services that the Authority provides on a daily basis.

"Providing residents with the highest-quality water possible is our foremost priority at the Suffolk County Water Authority," said SCWA Chairman Charles Lefkowitz. "When your drinking water is compromised by contamination, your entire quality of life is threatened. The people in this community haven't been able to drink a glass of water, cook or bathe without wondering if their water was going to make them sick. They don't need to worry anymore because SCWA is here to provide them with high quality drinking water."

Joining Lefkowitz for the announcement were New York State Senator Dean Murray, Assemblywoman Jodi Giglio, Brookhaven Town Supervisor Dan Panico and Executive Director of Citizen's Campaign for the Environment Adrienne Esposito.

TABLE OF UNDETECTED COMPOUNDS

In 2023 we tested our drinking water for these compounds and they were not detected.

1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloropropene
1,2,3-Trichlorobenzene
1,2-Dibromo-3-Chloropropane,Low Level
1,2-Dibromoethane (EDB),Low Level
1,2-Dichlorobenzene
1,3,5-Trimethylbenzene
1,3-Dichloropropane
1,4-Dichlorobenzene
1,7-Dimethylxanthine
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid
1H,1H,2H,2H-Perfluorodecane Sulfonic Acid
1H,1H,2H,2H-Perfluorohexane Sulfonic Acid
1-Naphthol
2,2-Dichloropropane
2,4,5-T
*2,4,6-Trichloroanisole
2,4,6-Trichlorophenol
2,4-D
2,4-DB
2,4-Dichlorophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Chlorotoluene
2-Isobutyl-3-methoxypyrazine (IBMP)
2-Isopropyl-3-methoxypyrazine(IPMP)
*2-Methylisoborneol
3,5-Dichlorobenzoic Acid
3-Hydroxycarbofuran
4,4´ - DDD
4,4´ - DDE
4,4´ - DDT
4,8-Dioxa-3H-perfluorononanoic Acid
4-Chlorotoluene
4-Isopropyltoluene
4-Nitrophenol
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic Acid
Acenaphthene
*Acetaldehyde
Acetaminophen
Acetochlor
Acifluorfen
*Actinium-227
Aldicarb
Aldrin
Alitame
*Americium-241
*Americium-243
Amobarbital
Anthracene
Antimony
*Antimony-124
*Antimony-125
Atrazine
Azobenzene
*Barium-133
Bentazon
Benz[a]anthracene
*Benzaldehyde
Benzene
Benzo[a]pyrene
Benzophenone
Benzotriazole
Beryllium
*Beryllium-7
BHC (Alpha)
BHC (Beta)
BHC (Delta)
Bromacil
Bromate
Bromobenzene
Bromochloromethane
Bromomethane
Butabarbital
Butachlor
Butalbital
*Butanal
Butylbenzylphthalate
Cadmium
*Cadmium-109
Carbaryl
Carbazole
Carbofuran
*Cerium-139
*Cesium-134
*Cesium-137
Chloramben
Chlorodibromoacetic Acid
Chloroethane
Chrysene
Cis-1,3-Dichloropropene
Cis-Permethrin
*Cobalt-57
*Cobalt-58
*Cobalt-60
Codeine
Cotinine
*Crotonaldehyde
Cyanazine
Cyanide-Free
*Cyclohexanone
Dacthal (DCPA)
Dalapon
*Decanal
Di(2-Ethylhexyl) Adipate
Di(2-Ethylhexyl) Phthalate
Diazinon
Dibromomethane
Dicamba
Dichlobenil
Dichlorprop
Dieldrin
Diethylphthalate
Dimethylphthalate
Di-n-Butyl Phthalate
Dinoseb
Dulcin
Endosulfan I
Endosulfan II
Endosulfan Sulfate
Endrin
Endrin Aldehyde
Ethofumesate
Ethoprophos
*Europium-152
*Europium-154
*Europium-155
Fluorene
*Formaldehyde
*Formic Acid
*Geosmin
Germanium-72
*Glyoxal
Heptachlor
Heptachlor Epoxide
*Heptanal
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexafluoropropylene Oxide Dimer Acid
*Hexanal
Hexazinone
Hydrocodone
*Iron-59
Isophorone
Isopropylbenzene
Lamotrigine
Lead
*Lead-210
Lindane (Gamma-BHC)
Malathion
*Manganese-54
Mercury
*Mercury-203
Methiocarb
Methomyl
Methoxychlor
Methylene Chloride
*Methyl Glyoxal
Metribuzin
Molinate
Molybdenum
Monobromoacetic Acid (MBAA)
Monochloroacetic Acid (MCAA)
*N-Butylbenzene
N-ethyl perfluorooctanesulfonamidoacetic Acid
N-methyl perfluoroocatnesulfonamidoacetic Acid
*N-Nitrosodi-N-propylamine
*N-Nitrosodiethylamine
*N-Nitrosodimethylamine
*N-Nitrosodiphenylamine
*N-Nitrosomethylethylamine
*N-Nitrosomorpholine
*N-Nitrosopiperidine
*N-Nitrosopyrrolidine
*N-Propylbenzene
Naphthalene
Napropamide
Naproxen
Neohesperidin dihydrochalcone
Neotame
*Niobium-94
Nonafluoro-3-6-dioxaheptanoic Acid
*Nonanal
*Octanal
*Oxalic Acid
Oxamyl
Oxyfluorfen
Pentachlorophenol
*Pentanal
Pentobarbital
Perfluoro(2-ethoxyethane)sulfonic Acid
Perfluoro-3-methoxypropanoic Acid
Perfluoro-4-methoxybutanoic Acid
Perfluorodecanoic Acid
Perfluorododecanoic Acid
Perfluoroheptanesulfonic Acid
Perfluorotetradecanoic Acid
Perfluorotridecanoic Acid
Perfluoroundecanoic Acid
Phenanthrene
Picloram
Polychlorinated Biphenyls(PCBs)
*Potassium-40
Prilocaine
Propachlor
*Propanal
Propoxur
Ronstar
*Ruthenium-103
*Scandium-46
Sec-Butylbenzene
Selenium
S-Ethyl dipropylthiocarbamate(EPTC)
Silver
Silvex (2,4,5-TP)
Simazine
*Sodium-22
Stevioside
Styrene
Surfactants, anionic
Tebuconazole
Terbacil
Tert-Amyl Methyl Ether
Tert-Butylbenzene
Tetrahydrofuran
Thallium
Threshold Odor
Tin
*Tin-113
Toxaphene
Trans-1,2-Dichloroethene
Trans-1,3-Dichloropropene
Trans-Permethrin
Tribromoacetic Acid
Tribufos
Triclosan
Trifluralin
*Tritium
*Uranium-235
Vinclozolin
Vinyl Chloride
Warfarin
*Yttrium-88
*Zinc-65
*Zirconium-95

*Selected monitoring at specific wellfields in distribution areas 1, 12, 15 and 23.

A124

NOTICES AND STATISTICS FOR WATER DISTRICTS THE SCWA OPERATES

Special Notice for East Farmingdale Water District

The Suffolk County Water Authority assumed operation of the East Farmingdale Water District in October of 2010. Test results for the East Farmingdale Water District may be found on page 27 under Distribution Area EFWD and pertinent statistics are in the table shown below. Although this notice is being provided separately, please be assured information you read elsewhere in this booklet about the protections and services we offer to our customers applies to you as well.

East Farmingdale Water District Statistics

Customers	2,452
Population Served	7,356
Miles of Main	45.3
Fire Hydrants	448
Water Used (Million Gallons)	638
Average Annual Bill (250,303 gallons)	$919
Water Billed (Million Gallons)	614
Percentage of Water Unaccounted for	8.2%

Special Notice for Riverside Water District

The Suffolk County Water Authority operates the Riverside Water District, and we serve 620 people there with an estimated population of 1,860. Test results for the Riverside Water District may be found on page 28 under Distribution Area RSWD. Although this notice is being provided separately, please be assured information you read elsewhere in this booklet about the protections and services we offer to our customers applies to you as well.

Special Notice for Dering Harbor Water District

The Suffolk County Water Authority assumed operation of the Dering Harbor Water District in 2020, and we serve 34 residential and commercial properties with an estimated population of 136. Test results for the West Neck Water District may be found on page 27 under Distribution Area 64. Although this notice is being provided separately, please be assured information you read elsewhere in this booklet about the protections and services we offer to our customers applies to you as well.

Special Notice for Stony Brook Water District

The Suffolk County Water Authority operates the Stony Brook Water District. Test results for the Stony Brook Water District may be found on page 28 under Distribution Area SBWD and pertinent statistics are in the table shown below. Although this notice is being provided separately, please be assured information you read elsewhere in this booklet about the protections and services we offer to our customers applies to you as well.

Stony Brook Water District Statistics

Customers	1,644
Population Served	4,932
Miles of Main	29
Fire Hydrants	216
Water Used (Million Gallons)	238
Average Annual Bill (131,947 gallons)	$161
Water Billed (Million Gallons)	229
Percentage of Water Unaccounted for	8.2%

Special Notice for Brentwood and Fair Harbor Water Districts

The Suffolk County Water Authority assumed operation of the Brentwood and Fair Harbor Water Districts in 2000. Brentwood Water District is a part of SCWA Distribution Area 15. Test results for Brentwood may be found on page 23. Test results for Fair Harbor may be found on page 26 under Distribution Area 53. Although this notice is being provided separately, please be assured information you read elsewhere in this booklet about the protections and services we offer to our customers applies to you as well.

Special Notice for West Neck Water District

The Suffolk County Water Authority assumed operation of the West Neck Water District in 2022, and we serve 70 residential and commercial properties with an estimated population of 200. Test results for the West Neck Water District may be found on page 28 under Distribution Area WNWD. Although this notice is being provided separately, please be assured information you read elsewhere in this booklet about the protections and services we offer to our customers applies to you as well.

MISSION STATEMENT AND CONTACT INFORMATION

MISSION STATEMENT

"Our mission is to provide the customers of the Suffolk County Water Authority the highest quality water at the lowest possible cost with excellent customer service."

Thank you for taking the time to read this report. If you have any questions about the information contained in this report, your drinking water, or the Authority in general, please call our
Customer Contact Center at 631-698-9500.
We will be more than happy to answer your questions.

SCWA Offices And Contact Information

Normal business hours, Monday - Friday, 8:30 a.m. - 5:00 p.m.

Administrative Offices
4060 Sunrise Highway Oakdale, NY 11769

Customer Service Center
2045 Route 112, Suite 5, Coram, NY 11727 (631) 698-9500

For the Hearing Impaired
TDD Customer Service Number is 589-5210

Need more information about us? You may also be interested in attending one of the meetings of the Suffolk County Water Authority Board. Please feel free to attend these meetings, which are generally held at 3 p.m. on the last Thursday of the month at our headquarters in Oakdale. Additionally, the Suffolk County Department of Health Services Office of Water Resources oversees the SCWA. If you prefer, questions regarding the SCWA and/or this report can be directed to them at 631-852-5810.

Federal Public Water Supply ID Numbers

Brentwood Water District 5103692
Dering Harbor Water District. 5103700
East Farmingdale Water District . . . 5103701
Fair Harbor Water District 5110599
Riverside Water District. 5105655
Stony Brook Water District 5103698
Suffolk County Water Authority. 5110526
West Neck Water District 5110623